According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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ECTION 1. IDENTIFICATION		
Product name	: FormulaShell SAE 10W-30 Motor	Oil
Product code	: 001D7227	
Manufacturer or supplier	's details	
Manufacturer/Supplier	: Shell Oil Products US P.O. Box 4427 Houston TX 77210-4427 USA	
SDS Request	: (+1) 877-276-7285	
Customer Service	:	
Emergency telephone nu	mber	
	: 877-504-9351	
Health Information	: 877-242-7400	
Recommended use of th	e chemical and restrictions on use	
Recommended use		

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Hazard pictograms	: No Hazard Symbol required
Signal word	: No signal word
Hazard statements	 PHYSICAL HAZARDS: Not classified as a physical hazard under GHScriteria. HEALTH HAZARDS: Not classified as a health hazard under GHScriteria. ENVIRONMENTAL HAZARDS: Not classified as an environmental hazard under GHS criteria.
Precautionary statements	 Prevention: No precautionary phrases. Response: No precautionary phrases. Storage: No precautionary phrases. Disposal: No precautionary phrases.

Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

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Used oil may contain harmful impurities. Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature	 Highly refined mineral oil. Synthetic base oil and additives. The highly refined mineral oil contains <3% (w/w) DMSO- extract, according to IP346.
	* contains one or more of the following CAS-numbers: 64742- 53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69- 9.

Hazardous components

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Polyolefin Amide Alke- neamine Polyol		308070-26-0	1 - 3
Alkaryl amine		112-90-3	1 - 3
Interchangeable low vis- cosity base oil (<20,5 cSt @40°C) *		64742-54-7 and 848301-69-9	0 - 90

SECTION 4. FIRST-AID MEASURES

General advice	: Not expected to be a health hazard when used under normal conditions.
If inhaled	: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
In case of skin contact	: Remove contaminated clothing. Flush exposed area with wa- ter and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
In case of eye contact	: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
If swallowed	: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Most important symptoms and effects, both acute and delayed	: Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.

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Protection of first-aiders	: When administering first aid, ens appropriate personal protective e incident, injury and surroundings.	quipment according to the
Immediate medical attention, special treatment	: Treat symptomatically.	

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Foam, water spray or fog. Dry chemical powder, carbon dio- xide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	: Do not use water in a jet.
Specific hazards during fire- fighting	 Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.
Specific extinguishing me- thods	: Use extinguishing measures that are appropriate to local cir- cumstances and the surroundingenvironment.
Special protective equipment for firefighters	: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	: Avoid contact with skin and eyes.
Environmental precautions	 Use appropriate containment to avoid environmental contami- nation. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	: Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

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Additional advice	: For guidance on selection of per see Chapter 8 of this Safety Da For guidance on disposal of spi this Safety Data Sheet.	ta Sheet.

SECTION 7. HANDLING AND STORAGE

Technical measures	: Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
Precautions for safe handling	 Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning mate- rials in order to prevent fires.
Avoidance of contact	: Strong oxidising agents.
Product Transfer	: This material has the potential to be a static accumulator. Proper grounding and bonding procedures should be used during all bulk transfer operations.
Storage	
Other data	 Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.
	Store at ambient temperature.
Packaging material	: Suitable material: For containers or container linings, use mild steel or high density polyethylene. Unsuitable material: PVC.
Container Advice	: Polyethylene containers should not be exposed to high tem- peratures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<u> </u>	•			
Components	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
Oil mist, mineral	Not Assigned	TWA ((inhal-	5 mg/m3	US. ACGIH
	C C	able frac-	Ū	Threshold
		tion))		Limit Values
		(Mist)	5 mg/m3	OSHA_TRA

Components with workplace control parameters

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Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

Engineering measures	 The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations.
	Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
	General Information:
	Define procedures for safe handling and maintenance of controls.
	Educate and train workers in the hazards and control meas- ures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation. Drain down system prior to equipment break-in or mainten-
	ance. Retain drain downs in sealed storage pending disposal or subsequent recycle.
	Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard con- taminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment

Respiratory protection : No respiratory protection is ordinarily required undernormal conditions of use. In accordance with good industrial hygiene practices, precau-

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	tions should be taken to avoid b If engineering controls do not m tions to a level which is adequat select respiratory protection equ cific conditions of use and meet Check with respiratory protectiv Where air-filtering respirators ar priate combination of mask and Select a filter suitable for the con and vapours [Type A/Type P bo	aintain airborne concentra- te to protect worker health, uipment suitable for the spe- ing relevant legislation. e equipment suppliers. re suitable, select an appro- filter. mbination of organic gases
Hand protection		
Remarks	: Where hand contact with the pro- gloves approved to relevant star US: F739) made from the follow suitable chemical protection. PV gloves Suitability and durability usage, e.g. frequency and durat sistance of glove material, dexte glove suppliers. Contaminated g Personal hygiene is a key eleme Gloves must only be worn on cle gloves, hands should be washe cation of a non-perfumed moistu For continuous contact we recon through time of more than 240 r 480 minutes where suitable gloves o may not be available and in this time maybe acceptable so long and replacement regimes are for a good predictor of glove resista dependent on the exact compos Glove thickness should be typic depending on the glove make an	ndards (e.g. Europe: EN374, ving materials may provide /C, neoprene or nitrile rubber of a glove is dependent on tion of contact, chemical re- erity. Always seek advice from gloves should be replaced. ent of effective hand care. ean hands. After using d and dried thoroughly. Appli- urizer is recommended. mmend gloves with break- ninutes with preference for > ves can be identified. For recommend the same, but ffering this level of protection case a lower breakthrough as appropriate maintenance blowed. Glove thickness is not ance to a chemical as it is sition of the glove material. ally greater than 0.35 mm
Eye protection	: If material is handled such that it protective eyewear is recommer	
Skin and body protection	: Skin protection is not ordinarily work clothes. It is good practice to wear chemi	
Protective measures	: Personal protective equipment (mended national standards. Ch	
Environmental exposure of	controls	
General advice	: Take appropriate measures to fu vant environmental protection le of the environment by following necessary, prevent undissolved charged to waste water. Waste municipal or industrial waste wa discharge to surface water.	egislation. Avoid contamination advice given in Chapter 6. If material from being dis- water should be treated in a tter treatment plant before
15	Local guidelines on emission lim	800001028894

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	must be observed for the dischar vapour.	arge of exhaust air containing
SECTION 9. PHYSICAL AND CHE	EMICAL PROPERTIES	
Appearance	: Liquid at room temperature.	
Colour	: amber	
Odour	: Slight hydrocarbon	
Odour Threshold	: Data not available	
рН	: Not applicable	
pour point	: -43 °C / -45 °FMethod: Unspec	sified
Initial boiling point and boiling range	: > 280 °C / 536 °Festimated val	lue(s)
Flash point	: 228 °C / 442 °F Method: Unspecified	
Evaporation rate	: Data not available	
Flammability (solid, gas)	: Data not available	
Upper explosion limit	: Typical 10 %(V)	
Lower explosion limit	: Typical 1 %(V)	
Vapour pressure	: < 0.5 Pa (20 °C / 68 °F) estimated value(s)	
Relative vapour density	: > 1estimated value(s)	
Relative density	: 0.880 (15 °C / 59 °F)	
Density	: 880 kg/m3 (15.0 °C / 59.0 °F) Method: Unspecified	
Solubility(ies) Water solubility	: negligible	
Solubility in other solvents	: Data not available	
Partition coefficient: n- octanol/water	: Pow: > 6(based on information	n on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F	

Viscosity

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Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 69.05 mm2/s (40.0 °C / 104.0 °F) Method: Unspecified	
	10.42 mm2/s (100 °C / 212 °F) Method: Unspecified	
Conductivity	: This material is not expected to be	a static accumulator.
Decomposition temperature	: Data not available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability	: Stable.
Possibility of hazardous reac- tions	: Reacts with strong oxidising agents.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidising agents.
Hazardous decomposition products	: Hazardous decomposition products are not expected to form during normal storage.

SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on dat the toxicology of similar products. the data presented is representat whole, rather than for individual of	Unless indicated otherwise, ive of the product as a
--	--

Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute toxicity

Product:	
Acute oral toxicity	: LD50 (rat): > 5,000 mg/kg Remarks: Expected to be of low toxicity:
Acute inhalation toxicity	: Remarks: Not considered to be an inhalation hazard under normal conditions of use.
Acute dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg Remarks: Expected to be of low toxicity:

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Skin corrosion/irritation

Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Serious eye damage/eye irritation

Product:

Remarks: Expected to be slightly irritating.

Respiratory or skin sensitisation

Product:

Remarks: Not expected to be a skin sensitiser.

Germ cell mutagenicity

Product:

: Remarks: Not considered a mutagenic hazard.

Carcinogenicity

Product:

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skinpainting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	

Product:

Remarks: Not expected to impair fertility., Not expected to be

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a developmental toxicant.

STOT - single exposure

Product:

Remarks: Not expected to be a hazard.

STOT - repeated exposure

Product:

Remarks: Not expected to be a hazard.

Aspiration toxicity

Product:

Not considered an aspiration hazard.

Further information

Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: Continuous contact with used engine oils has caused skin cancer in animal tests.

Remarks: Slightly irritating to respiratory system.

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment :	Ecotoxicological data have not been determined for this product. Information given is based on a knowledge of the and the ecotoxicology of similar products. Unless indicated otherwise, the data presented tive of the product as a whole, rather than for in- ponent(s).(LL/EL/IL50 expressed as the nominal product required to prepare aqueous test extract	he components is representa- dividual com- al amount of
Ecotoxicity		
Product: Toxicity to fish (Acute toxic- : ity)	Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l	
Toxicity to daphnia and other : aquatic invertebrates (Acute toxicity)	Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l	
Toxicity to algae (Acute toxic- : ity)	Remarks: Expected to be practically nontoxic:	
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	LL/EL/IL50 > 100 mg/l	
Toxicity to fish (Chronic toxic- ity)	: Remarks: Data not available	
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	: Remarks: Data not available	
Toxicity to bacteria (Acute toxicity)	: Remarks: Data not available	
Persistence and degradability	/	
Product:		
Biodegradability	: Remarks: Expected to be not Major constituents are expect ble, but contains components ment.	ed to be inherently biodegra
Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: Contains componer cumulate.	ts with the potential to bioa
Mobility in soil		
Product:		
Mobility	: Remarks: Liquid under most e If it enters soil, it will adsorb to mobile.	
	Remarks: Floats on water.	
Other adverse effects		
no data available		
Product:		
Additional ecological informa- tion	: Product is a mixture of non-vola expected to be released to air Not expected to have ozone d cal ozone creation potential or	in any significant quantities. epletion potential, photoche
	Poorly soluble mixture.	
	May cause physical fouling of	aquatic organisms.

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods Waste from residues	: Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.
	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or na- tional requirements and must be complied with.
Contaminated packaging	: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

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SECTION 14. TRANSPORT INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

International Regulation

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Pollution category	: Not applicable
Ship type	: Not applicable
Product name	: Not applicable
Special precautions	: Not applicable

Special precautions for user

Remarks

- : Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.
- Additional Information : MARPOL Annex 1 rules apply for bulk shipments by sea.

SECTION 15. REGULATORY INFORMATION

- **OSHA Hazards**
- : No OSHA Hazards

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EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 302	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
The components of this prod EINECS	uct are reported in the following inventories: : All components listed or polymer exempt.
TSCA	: All components listed.
DSL	: All components listed.

SECTION 16. OTHER INFORMATION

Further information

NFPA Rating (Health, Fire, Reac- 0, 1, 0 tivity)

		indicates an amendment from the previous version. The standard abbreviations and acronyms used in this docu- ment can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.
		ACGIH = American Conference of Governmental Industrial Hygienists ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road AICS = Australian Inventory of Chemical Substances ASTM = American Society for Testing and Materials BEL = Biological exposure limits BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
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	CAS = Chemical Abstracts Ser	vice
	CEFIC = European Chemical	
	CLP = Classification Packagin	
	COC = Cleveland Open-Cup	
	DIN = Deutsches Institut fur N	ormuna
	DMEL = Derived Minimal Effe	
	DNEL = Derived No Effect Lev	
	DSL = Canada Domestic Subs	
	EC = European Commission	
	EC50 = Effective Concentratio	n fifty
	ECETOC = European Center of	
	gy Of Chemicals	
	ECHA = European Chemicals	Agency
	EINECS = The European Inve	
	Chemical Substances	ntory of Existing Commercial
	EL50 = Effective Loading fifty	
	ENCS = Japanese Existing an	d New Chemical Substances
	Inventory	
	EWC = European Waste Code	1
	GHS = Globally Harmonised S	
	Labelling of Chemicals	yetem er elacemeatien and
	IARC = International Agency for	or Research on Cancer
	IATA = International Air Transp	
	IC50 = Inhibitory Concentration	
	IL50 = Inhibitory Level fifty	
	IMDG = International Maritime	Dangerous Goods
	INV = Chinese Chemicals Inve	
	IP346 = Institute of Petroleum	
	determination of polycyclic aro	
	KECI = Korea Existing Chemic	
	LC50 = Lethal Concentration fi	
	LD50 = Lethal Dose fifty per ce	
	LL/EL/IL = Lethal Loading/Effe	
	LL50 = Lethal Loading fifty	
	MARPOL = International Conv	ention for the Prevention of
	Pollution From Ships	
	NOEC/NOEL = No Observed I	Effect Concentration / NoOb-
	served Effect Level	
	OE_HPV = Occupational Expo	sure - High Production Volume
	PBT = Persistent, Bioaccumula	
	PICCS = Philippine Inventory	
	Substances	
	PNEC = Predicted No Effect C	oncentration
	REACH = Registration Evaluat	
	Chemicals	
	RID = Regulations Relating to	International Carriage of Dan-
	gerous Goods by Rail	
	SKIN_DES = Skin Designation	
	STEL = Short term exposure li	
	TRA = Targeted Risk Assessm	
	TSCA = US Toxic Substances	
	TWA = Time-Weighted Average	
	vPvB = very Persistent and ve	

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Issuing Date 20-Jul-2017

Revision Date 20-Jul-2017

Revision Number 1

NGHS / English



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Product identifierProduct NameLEAD ACID BATTERY WET FILLED WITH ACIDProduct NameLEAD ACID BATTERY WET FILLED WITH ACIDOther means of identification110599Product Code(s)110599Recommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safetterSafe Penn Mfg.AddressEast Penn Mfg.AddressPhone:610-682-6361 Fax:610-682-1650Fenallngriffith@dekabatteries.comEmergency telephone number10-682-6361 Fax:610-682-1650		1. IDENTIFICATION
Other means of identification I110599 Product Code(s) 1110599 Recommended use of the chemical and restrictions on use Recommended Use Recommended Use Lead acid battery Restrictions on use No information available Details of the supplier of the safety a sheet Supplier Identification Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail Emergency telephone number mgriffith@dekabatteries.com Emergency Telephone 610-682-6361	Product identifier	
Product Code(s)1110599Recommended use of the chemical and restrictions on useLead acid batteryRecommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safety at sheetSupplier IdentificationAddressDeka Rd Lyon Station PA at 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361 Fax:610-682-6361Company Emergency Phone610-682-6361	Product Name	LEAD ACID BATTERY WET FILLED WITH ACID
Recommended use of the chemical and restrictions on use Recommended Use Lead acid battery Restrictions on use No information available Details of the supplier of the safety data sheet Supplier Identification Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361 Company Emergency Phone 610-682-6361	Other means of identification	
Recommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safety Jata sheetSupplier IdentificationSupplier IdentificationEast Penn Mfg.AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Product Code(s)	1110599
Restrictions on use No information available Details of the supplier of the safety data sheet Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361 Company Emergency Phone 610-682-6361	Recommended use of the chemica	I and restrictions on use
Details of the supplier of the safety data sheet Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361 Company Emergency Phone 610-682-6361	Recommended Use	Lead acid battery
Supplier IdentificationEast Penn Mfg.AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Restrictions on use	No information available
AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Details of the supplier of the safety	y data sheet
Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Supplier Identification	East Penn Mfg.
Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361	Address	Lyon Station PA 19536
Emergency telephone number Company Emergency Phone 610-682-6361	Telephone	
Company Emergency Phone 610-682-6361	E-mail	mgriffith@dekabatteries.com
	Emergency telephone number	
		610-682-6361

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1



1110599 - LEAD ACID BATTERY WET FILLED WITH ACID

Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1A
Effects on or via lactation	Yes
Specific target organ toxicity (repeated exposure)	Category 1
Corrosive to metals	Category 1

This is a battery. In case of rupture: the above hazards exist.

Appearance Varies

Physical state Solid

Odor Odorless

GHS Label elements, including precautionary statements

Danger

Hazard statements

Harmful if swallowed Toxic if inhaled Causes severe skin burns and eye damage May cause cancer May damage fertility or the unborn child May cause harm to breast-fed children Causes damage to organs through prolonged or repeated exposure May be corrosive to metals



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

Avoid contact during pregnancy/while nursing

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep only in original container

Precautionary Statements - Response Immediately call a POISON CENTER or doctor/physician Specific treatment (see supplemental first aid instructions on this label)

Eyes

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

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Inhalation

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



Immediately call a POISON CENTER or doctor/physician Indestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Do NOT induce vomiting Spill Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed Store in corrosion resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS-No	Percent	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lead	7439-92-1	70	-	-
Sulfuric acid	7664-93-9	26	-	-
Antimony	7440-36-0	4	-	-

4. FIRST AID MEASURES

First aid measures

General advice

Inhalation

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention. First aid is upon rupture of sealed battery.

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Do not breathe dust. Get immediate medical advice/attention.



Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.
Indication of any immediate medica	al attention and special treatment needed
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.
	5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous Combustion Products	Carbon oxides.
Explosion Data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

•	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe
	areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not

	breathe dust.	
Other Information	Refer to protective measures listed in Sections 7 and 8.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Do not breathe dust. Avoid generation of dust.

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep out of the reach of children. Store away from other materials. Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name		ACGIH T	LV	0	SHA PEL		NIOSH IDLH
Lead		TWA: 0.05 mg/m ³		TWA: 50 µg,	/m³ TWA: 50 µg/m³	IDLF	H: 100 mg/m ³ IDLH: 100
7439-92-1					Pb		mg/m³ Pb
					evel: 30 µg/m³	TWA:	0.050 mg/m ³ TWA: 0.050
					29 CFR 1910.1025		mg/m³ Pb
					vel: 30 µg/m³ Pb		
				Poison;See	29 CFR 1910.1025		
Sulfuric acid		TWA: 0.2 mg/m ³		TW	A: 1 mg/m ³		IDLH: 15 mg/m ³
7664-93-9		particulate matter		(vacated)) TWA: 1 mg/m ³		TWA: 1 mg/m ³
Antimony		TWA: 0.5 mg/m ³ TWA: 0.5		TWA: 0.5	mg/m ³ TWA: 0.5	IDL	_H: 50 mg/m ³ IDLH: 50
7440-36-0		mg/m³ S	b		ng/m³ Sb		mg/m³ Sb
				(vacated)	TWA: 0.5 mg/m ³	TW	A: 0.5 mg/m ³ TWA: 0.5
				(vacated) T	WA: 0.5 mg/m ³ Sb		mg/m³ Sb
Chemical name		Alberta	British C	Columbia	Ontario TWAE	V	Quebec
Lead	τv	VA: 0.05 mg/m ³	TWA: 0.0	05 mg/m ³	TWA: 0.05 mg/i	m ³	TWA: 0.05 mg/m ³
7439-92-1				-			
Sulfuric acid	7	「WA: 1 mg/m³	TWA: 0.	2 mg/m ³	TWA: 0.2 mg/n	n ³	TWA: 1 mg/m ³
7664-93-9	S	STEL: 3 mg/m ³		-			STEL: 3 mg/m ³
Antimony	T	WA: 0.5 mg/m ³	TWA: 0.	5 mg/m ³	TWA: 0.5 mg/n	n ³	TWA: 0.5 mg/m ³
7440-36-0		-		-			-



Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.
Appropriate engineering controls	
Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, su	ch as personal protective equipment
Eye/face protection	Face protection shield.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties Physical state Appearance Odor Color Odor Threshold	Solid Varies Odorless No information available No information available	
Property	Values	Remarks Method
рН	2	
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.27	
Water Solubility	Reacts with water	
Solubility(ies)	No data available	None known
Partition coefficient: n-octanol/wate	erNA	
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known



Dynamic viscosity	No data available	None known
Other Information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening Point	No information available	
Molecular Weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk Density	No information available	
Particle Size	No information available	
Particle Size Distribution	No information available	

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Oxidizing agent. Acids. Bases.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information In case of rupture:
Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Toxic by inhalation.
Eye contact	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Information on toxicological effects

Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing. Difficulty in breathing.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	624.00 mg/kg
ATEmix (inhalation-gas)	4,500.00 mg/L
ATEmix (inhalation-dust/mist)	0.66 mg/L
ATEmix (inhalation-vapor)	11.00 mg/L

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h
Antimony	= 7 g/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes burns.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Classification based on data available for ingredients. Contains a known or suspected carcinogen.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

				-
Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	A3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

Leaend

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor)



X - PresentReproductive toxicityClassification based on data available for ingredients. Contains a known or suspected
reproductive toxin. May cause harm to breastfed babies.STOT - single exposureNo information available.STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.Aspiration hazardNo information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to	Daphnia Magna (Wate
			Microorganisms	Flea)
Lead	-	96h LC50: = 0.44 mg/L	-	48h EC50: = 600 µg/L
		(Cyprinus carpio) 96h		
		LC50: = 1.17 mg/L		
		(Oncorhynchus mykiss)		
		96h LC50: = 1.32 mg/L		
		(Oncorhynchus mykiss)		
Sulfuric acid	-	96h LC50: > 500 mg/L	-	24h EC50: = 29 mg/L
		(Brachydanio rerio)		

Persistence and Degradability	No information available.
Bioaccumulation	There is no data for this product.
Mobility	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

US EPA Waste Number

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

 Chemical name
 RCRA - Halogenated Organic Compounds
 RCRA - P Series Wastes
 RCRA - F Series Wastes
 RCRA - K Series Wastes

 Antimony 7440-36-0
 Antimony 7440-36-0
 Toxic waste
 Waste number K021 Waste description: Aqueous spent antimony catalyst waste from fluoromethanes production.

D008 D002



California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste	
Lead	Toxic	
7439-92-1		
Sulfuric acid	Toxic	
7664-93-9	Corrosive	
Antimony	Toxic	
7440-36-0		

14. TRANSPORT INFORMATION

DOT UN-No. Proper Shipping Name Hazard Class Description Emergency Response Guide Number	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8 154
<u>TDG</u> UN-No. Proper Shipping Name Hazard Class Marine Pollutant Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 This product contains a chemical which is listed as a marine pollutant according to TDG. UN2794, BATTERIES, WET, FILLED WITH ACID, 8
MEX UN-No. Proper Shipping Name Hazard Class Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8
ICAO UN-No. Proper Shipping Name Hazard Class Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8
IATA UN-No. Proper Shipping Name Hazard Class ERG Code Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 8L UN2794, BATTERIES, WET, FILLED WITH ACID, 8
IMDG/IMO UN-No. Proper Shipping Name Hazard Class EmS-No. Marine Pollutant Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 F-A, S-B This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO UN2794, BATTERIES, WET, FILLED WITH ACID, 8

<u>RID</u> UN-No. Proper Shipping Name Hazard Class Classification code Description ADR/RID-Labels	UN2794 BATTERIES, WET, FILLED WITH ACID 8 C11 UN2794, BATTERIES, WET, FILLED WITH ACID, 8 8
ADR	
UN-No.	UN2794
Proper Shipping Name	BATTERIES, WET, FILLED WITH ACID
Hazard Class	8
Classification code	C11
Tunnel restriction code	
Description	UN2794, BATTERIES, WET, FILLED WITH ACID, 8, (E)
ADN	
UN-No.	UN2794
Proper Shipping Name	BATTERIES, WET, FILLED WITH ACID
Hazard Class	8
Classification code	C11
Special Provisions	
Description Hazard Labels	UN2794, BATTERIES, WET, FILLED WITH ACID, 8 8
Limited Quantity	8 1 L

15. REGULATORY INFORMATION

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

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 Australian Inventory of Chemical Substances

US Federal Regulations



<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS-No	Percent	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	70	0.1
Sulfuric acid - 7664-93-9	7664-93-9	26	1.0
Antimony - 7440-36-0	7440-36-0	4	1.0
· · · · · · · · · · · · · · · · · · ·	•	•	·

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	Х	
Sulfuric acid 7664-93-9	1000 lb			Х
Antimony 7440-36-0		Х	Х	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Antimony 7440-36-0	5000 lb 10 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations



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Chemical name	New Jersey	Massachusett s	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	Х	Х	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х

16. OTHER INFORMATION

NFPA_	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties -	
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal Protection X	
Prepared By					
Issuing Date	20-Jul-201	7			
Revision Date	20-Jul-201	20-Jul-2017			
Revision Note	No informa	ation available			

Disclaimer

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

End of Safety Data Sheet

Issuing Date 20-Jul-2017

Revision Date 20-Jul-2017

Revision Number 1

NGHS / English



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Product identifierProduct NameLEAD ACID BATTERY WET FILLED WITH ACIDProduct NameLEAD ACID BATTERY WET FILLED WITH ACIDOther means of identification110599Product Code(s)110599Recommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safetterSafe Penn Mfg.AddressEast Penn Mfg.AddressPhone:610-682-6361 Fax:610-682-1650Fenallngriffith@dekabatteries.comEmergency telephone number10-682-6361 Fax:610-682-1650		1. IDENTIFICATION
Other means of identification I110599 Product Code(s) 1110599 Recommended use of the chemical and restrictions on use Recommended Use Recommended Use Lead acid battery Restrictions on use No information available Details of the supplier of the safety a sheet Supplier Identification Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail Emergency telephone number mgriffith@dekabatteries.com Emergency Telephone 610-682-6361	Product identifier	
Product Code(s)1110599Recommended use of the chemical and restrictions on useLead acid batteryRecommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safety at sheetSupplier IdentificationAddressDeka Rd Lyon Station PA at 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361 Fax:610-682-6361Company Emergency Phone610-682-6361	Product Name	LEAD ACID BATTERY WET FILLED WITH ACID
Recommended use of the chemical and restrictions on use Recommended Use Lead acid battery Restrictions on use No information available Details of the supplier of the safety data sheet Supplier Identification Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361 Company Emergency Phone 610-682-6361	Other means of identification	
Recommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safety Jata sheetSupplier IdentificationSupplier IdentificationEast Penn Mfg.AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Product Code(s)	1110599
Restrictions on use No information available Details of the supplier of the safety data sheet Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361 Company Emergency Phone 610-682-6361	Recommended use of the chemica	I and restrictions on use
Details of the supplier of the safety data sheet Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361 Company Emergency Phone 610-682-6361	Recommended Use	Lead acid battery
Supplier IdentificationEast Penn Mfg.AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Restrictions on use	No information available
AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Details of the supplier of the safety	y data sheet
Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Supplier Identification	East Penn Mfg.
Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361	Address	Lyon Station PA 19536
Emergency telephone number Company Emergency Phone 610-682-6361	Telephone	
Company Emergency Phone 610-682-6361	E-mail	mgriffith@dekabatteries.com
	Emergency telephone number	
		610-682-6361

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1



1110599 - LEAD ACID BATTERY WET FILLED WITH ACID

Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1A
Effects on or via lactation	Yes
Specific target organ toxicity (repeated exposure)	Category 1
Corrosive to metals	Category 1

This is a battery. In case of rupture: the above hazards exist.

Appearance Varies

Physical state Solid

Odor Odorless

GHS Label elements, including precautionary statements

Danger

Hazard statements

Harmful if swallowed Toxic if inhaled Causes severe skin burns and eye damage May cause cancer May damage fertility or the unborn child May cause harm to breast-fed children Causes damage to organs through prolonged or repeated exposure May be corrosive to metals



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

Avoid contact during pregnancy/while nursing

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep only in original container

Precautionary Statements - Response Immediately call a POISON CENTER or doctor/physician Specific treatment (see supplemental first aid instructions on this label)

Eyes

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

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Inhalation

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



Immediately call a POISON CENTER or doctor/physician Indestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Do NOT induce vomiting Spill Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed Store in corrosion resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS-No	Percent	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lead	7439-92-1	70	-	-
Sulfuric acid	7664-93-9	26	-	-
Antimony	7440-36-0	4	-	-

4. FIRST AID MEASURES

First aid measures

General advice

Inhalation

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention. First aid is upon rupture of sealed battery.

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Do not breathe dust. Get immediate medical advice/attention.



Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.
Indication of any immediate medica	al attention and special treatment needed
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.
	5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous Combustion Products	Carbon oxides.
Explosion Data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe
	areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not

	breathe dust.	
Other Information	Refer to protective measures listed in Sections 7 and 8.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Do not breathe dust. Avoid generation of dust.

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep out of the reach of children. Store away from other materials. Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name		ACGIH T	LV	0	SHA PEL		NIOSH IDLH
Lead		TWA: 0.05 mg/m ³		TWA: 50 µg,	/m³ TWA: 50 µg/m³	IDLF	H: 100 mg/m ³ IDLH: 100
7439-92-1					Pb		mg/m³ Pb
					evel: 30 µg/m³	TWA:	0.050 mg/m ³ TWA: 0.050
					29 CFR 1910.1025		mg/m³ Pb
					vel: 30 µg/m³ Pb		
				Poison;See	29 CFR 1910.1025		
Sulfuric acid		TWA: 0.2 mg/m ³		TW	A: 1 mg/m ³		IDLH: 15 mg/m ³
7664-93-9		particulate n	natter	(vacated)) TWA: 1 mg/m ³		TWA: 1 mg/m ³
Antimony		TWA: 0.5 mg/m ³ TWA: 0.5		TWA: 0.5	mg/m ³ TWA: 0.5	IDL	_H: 50 mg/m ³ IDLH: 50
7440-36-0		mg/m³ Sb			ng/m³ Sb		mg/m³ Sb
				(vacated)	TWA: 0.5 mg/m ³	TW	A: 0.5 mg/m ³ TWA: 0.5
				(vacated) T	WA: 0.5 mg/m ³ Sb		mg/m³ Sb
Chemical name		Alberta	British C	Columbia	Ontario TWAE	V	Quebec
Lead	T۷	VA: 0.05 mg/m ³	TWA: 0.0	05 mg/m ³	TWA: 0.05 mg/i	m ³	TWA: 0.05 mg/m ³
7439-92-1				-			
Sulfuric acid	7	TWA: 1 mg/m ³ TWA: 0.		2 mg/m ³	TWA: 0.2 mg/n	n ³	TWA: 1 mg/m ³
7664-93-9	S	STEL: 3 mg/m ³		-			STEL: 3 mg/m ³
Antimony	T	WA: 0.5 mg/m ³	TWA: 0.	5 mg/m ³	TWA: 0.5 mg/n	n ³	TWA: 0.5 mg/m ³
7440-36-0		-		-			-



Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.
Appropriate engineering controls	
Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, su	ch as personal protective equipment
Eye/face protection	Face protection shield.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties Physical state Appearance Odor Color Odor Threshold	Solid Varies Odorless No information available No information available			
Property	Values	Remarks Method		
рН	2			
Melting / freezing point	No data available	None known		
Boiling point / boiling range	No data available	None known		
Flash Point	No data available	None known		
Evaporation Rate	No data available	None known		
Flammability (solid, gas)	No data available	None known		
Flammability Limit in Air		None known		
Upper flammability limit	No data available			
Lower flammability limit	No data available			
Vapor pressure	No data available	None known		
Vapor density	No data available	None known		
Relative density	1.27			
Water Solubility	Reacts with water			
Solubility(ies)	No data available	None known		
Partition coefficient: n-octanol/waterNA				
Autoignition temperature	No data available	None known		
Decomposition temperature	No data available	None known		
Kinematic viscosity	No data available	None known		



Dynamic viscosity	No data available	None known
Other Information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening Point	No information available	
Molecular Weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk Density	No information available	
Particle Size	No information available	
Particle Size Distribution	No information available	

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Oxidizing agent. Acids. Bases.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information In case of rupture:		
Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Toxic by inhalation.		
Eye contact	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.		
Skin contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.		
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.		

Information on toxicological effects

Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing. Difficulty in breathing.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	624.00 mg/kg
ATEmix (inhalation-gas)	4,500.00 mg/L
ATEmix (inhalation-dust/mist)	0.66 mg/L
ATEmix (inhalation-vapor)	11.00 mg/L

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h
Antimony	= 7 g/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes burns.		
Serious eye damage/eye irritation	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.		
Respiratory or skin sensitization	No information available.		
Germ cell mutagenicity	No information available.		
Carcinogenicity	Classification based on data available for ingredients. Contains a known or suspected carcinogen.		

The table below indicates whether each agency has listed any ingredient as a carcinogen.

				-
Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	A3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

Leaend

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor)



X - PresentReproductive toxicityClassification based on data available for ingredients. Contains a known or suspected
reproductive toxin. May cause harm to breastfed babies.STOT - single exposureNo information available.STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.Aspiration hazardNo information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to	Daphnia Magna (Wate
			Microorganisms	Flea)
Lead	-	96h LC50: = 0.44 mg/L	-	48h EC50: = 600 µg/L
		(Cyprinus carpio) 96h		
		LC50: = 1.17 mg/L		
		(Oncorhynchus mykiss)		
		96h LC50: = 1.32 mg/L		
		(Oncorhynchus mykiss)		
Sulfuric acid	-	96h LC50: > 500 mg/L	-	24h EC50: = 29 mg/L
		(Brachydanio rerio)		

Persistence and Degradability	No information available.
Bioaccumulation	There is no data for this product.
Mobility	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

US EPA Waste Number

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

 Chemical name
 RCRA - Halogenated Organic Compounds
 RCRA - P Series Wastes
 RCRA - F Series Wastes
 RCRA - K Series Wastes

 Antimony 7440-36-0
 Antimony 7440-36-0
 Toxic waste
 Waste number K021 Waste description: Aqueous spent antimony catalyst waste from fluoromethanes production.

D008 D002



California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive
Antimony	Toxic
7440-36-0	

14. TRANSPORT INFORMATION

DOT UN-No. Proper Shipping Name Hazard Class Description Emergency Response Guide Number	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8 154
<u>TDG</u> UN-No. Proper Shipping Name Hazard Class Marine Pollutant Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 This product contains a chemical which is listed as a marine pollutant according to TDG. UN2794, BATTERIES, WET, FILLED WITH ACID, 8
MEX UN-No. Proper Shipping Name Hazard Class Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8
ICAO UN-No. Proper Shipping Name Hazard Class Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8
IATA UN-No. Proper Shipping Name Hazard Class ERG Code Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 8L UN2794, BATTERIES, WET, FILLED WITH ACID, 8
IMDG/IMO UN-No. Proper Shipping Name Hazard Class EmS-No. Marine Pollutant Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 F-A, S-B This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO UN2794, BATTERIES, WET, FILLED WITH ACID, 8

RID UN-No. Proper Shipping Name Hazard Class Classification code Description ADR/RID-Labels	UN2794 BATTERIES, WET, FILLED WITH ACID 8 C11 UN2794, BATTERIES, WET, FILLED WITH ACID, 8 8
ADR	
UN-No.	UN2794
Proper Shipping Name	BATTERIES, WET, FILLED WITH ACID
Hazard Class	8
Classification code	C11
Tunnel restriction code	
Description	UN2794, BATTERIES, WET, FILLED WITH ACID, 8, (E)
ADN	
UN-No.	UN2794
Proper Shipping Name	BATTERIES, WET, FILLED WITH ACID
Hazard Class	8
Classification code	C11
Special Provisions	
Description Hazard Labels	UN2794, BATTERIES, WET, FILLED WITH ACID, 8 8
Limited Quantity	8 1 L

15. REGULATORY INFORMATION

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

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 Australian Inventory of Chemical Substances

US Federal Regulations



<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS-No	Percent	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	70	0.1
Sulfuric acid - 7664-93-9	7664-93-9	26	1.0
Antimony - 7440-36-0	7440-36-0	4	1.0
· · · · · · · · · · · · · · · · · · ·	•	•	·

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	Х	
Sulfuric acid 7664-93-9	1000 lb			Х
Antimony 7440-36-0		Х	Х	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Antimony 7440-36-0	5000 lb 10 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations



1110599 - LEAD ACID BATTERY WET FILLED WITH ACID

Chemical name	New Jersey	Massachusett s	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	Х	Х	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х

16. OTHER INFORMATION

NFPA_	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties -	
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal Protection X	
Prepared By					
Issuing Date	20-Jul-201	7			
Revision Date	20-Jul-201	7			
Revision Note	No informa	ation available			

Disclaimer

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

End of Safety Data Sheet

SAFETY DATA SHEET

Issuing Date 20-Jul-2017

Revision Date 20-Jul-2017

Revision Number 1

NGHS / English



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Product identifierProduct NameLEAD ACID BATTERY WET FILLED WITH ACIDProduct NameLEAD ACID BATTERY WET FILLED WITH ACIDOther means of identification110599Product Code(s)110599Recommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safetterSafe Penn Mfg.AddressEast Penn Mfg.AddressPhone:610-682-6361 Fax:610-682-1650Fenallngriffith@dekabatteries.comEmergency telephone number10-682-6361 Fax:610-682-1650		1. IDENTIFICATION
Other means of identification I110599 Product Code(s) 1110599 Recommended use of the chemical and restrictions on use Recommended Use Recommended Use Lead acid battery Restrictions on use No information available Details of the supplier of the safety a sheet Supplier Identification Supplier Identification East Penn Mfg. Address Deka Rd Lyon Station PA 19536 US Telephone Phone:610-682-6361 Fax:610-682-1650 E-mail Emergency telephone number mgriffith@dekabatteries.com Emergency Telephone 610-682-6361	Product identifier	
Product Code(s)1110599Recommended use of the chemical and restrictions on useLead acid batteryRecommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safety at sheetSupplier IdentificationAddressDeka Rd Lyon Station PA at 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361 Fax:610-682-6361Company Emergency Phone610-682-6361	Product Name	LEAD ACID BATTERY WET FILLED WITH ACID
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Recommended UseLead acid batteryRestrictions on useNo information availableDetails of the supplier of the safety Jata sheetSupplier IdentificationSupplier IdentificationEast Penn Mfg.AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Product Code(s)	1110599
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Supplier IdentificationEast Penn Mfg.AddressDeka Rd Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Restrictions on use	No information available
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Lyon Station PA 19536 USTelephonePhone:610-682-6361 Fax:610-682-1650E-mailmgriffith@dekabatteries.comEmergency telephone number610-682-6361Company Emergency Phone610-682-6361	Supplier Identification	East Penn Mfg.
Fax:610-682-1650 E-mail mgriffith@dekabatteries.com Emergency telephone number 610-682-6361	Address	Lyon Station PA 19536
Emergency telephone number Company Emergency Phone 610-682-6361	Telephone	
Company Emergency Phone 610-682-6361	E-mail	mgriffith@dekabatteries.com
	Emergency telephone number	
		610-682-6361

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1



1110599 - LEAD ACID BATTERY WET FILLED WITH ACID

Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1A
Effects on or via lactation	Yes
Specific target organ toxicity (repeated exposure)	Category 1
Corrosive to metals	Category 1

This is a battery. In case of rupture: the above hazards exist.

Appearance Varies

Physical state Solid

Odor Odorless

GHS Label elements, including precautionary statements

Danger

Hazard statements

Harmful if swallowed Toxic if inhaled Causes severe skin burns and eye damage May cause cancer May damage fertility or the unborn child May cause harm to breast-fed children Causes damage to organs through prolonged or repeated exposure May be corrosive to metals



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

Avoid contact during pregnancy/while nursing

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep only in original container

Precautionary Statements - Response Immediately call a POISON CENTER or doctor/physician Specific treatment (see supplemental first aid instructions on this label)

Eyes

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

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Inhalation

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



Immediately call a POISON CENTER or doctor/physician Indestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Do NOT induce vomiting Spill Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed Store in corrosion resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS-No	Percent	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lead	7439-92-1	70	-	-
Sulfuric acid	7664-93-9	26	-	-
Antimony	7440-36-0	4	-	-

4. FIRST AID MEASURES

First aid measures

General advice

Inhalation

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention. First aid is upon rupture of sealed battery.

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Do not breathe dust. Get immediate medical advice/attention.



Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.
Indication of any immediate medica	al attention and special treatment needed
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.
	5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous Combustion Products	Carbon oxides.
Explosion Data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe
	areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not

	breathe dust.				
Other InformationRefer to protective measures listed in Sections 7 and 8.					
Methods and material for containment and cleaning up					
Methods for containment	Prevent further leakage or spillage if safe to do so.				
Methods for cleaning up	Pick up and transfer to properly labeled containers.				

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Do not breathe dust. Avoid generation of dust.

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep out of the reach of children. Store away from other materials. Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name		ACGIH T	LV	0	SHA PEL		NIOSH IDLH
Lead		TWA: 0.05 mg/m ³		TWA: 50 μg/m³ TWA: 50 μg/m³		IDLF	H: 100 mg/m ³ IDLH: 100
7439-92-1					Pb		mg/m³ Pb
					evel: 30 µg/m³	TWA:	0.050 mg/m ³ TWA: 0.050
					29 CFR 1910.1025		mg/m³ Pb
					vel: 30 µg/m³ Pb		
				Poison;See	29 CFR 1910.1025		
Sulfuric acid		TWA: 0.2 mg/m ³		TW	A: 1 mg/m ³		IDLH: 15 mg/m ³
7664-93-9		particulate n	natter	(vacated)) TWA: 1 mg/m ³		TWA: 1 mg/m ³
Antimony		TWA: 0.5 mg/m ³	TWA: 0.5 mg/m³ TWA: 0.5 TWA: 0		mg/m ³ TWA: 0.5	IDL	_H: 50 mg/m ³ IDLH: 50
7440-36-0		mg/m³ S	b		ng/m³ Sb		mg/m³ Sb
				(vacated)	TWA: 0.5 mg/m ³	TW	A: 0.5 mg/m ³ TWA: 0.5
				(vacated) T	WA: 0.5 mg/m ³ Sb		mg/m³ Sb
Chemical name		Alberta	British C	Columbia	Ontario TWAE	V	Quebec
Lead	τv	VA: 0.05 mg/m ³	TWA: 0.0	05 mg/m ³	TWA: 0.05 mg/i	m ³	TWA: 0.05 mg/m ³
7439-92-1				-			
Sulfuric acid	7	「WA: 1 mg/m³	TWA: 0.	2 mg/m ³	TWA: 0.2 mg/n	n ³	TWA: 1 mg/m ³
7664-93-9	5	STEL: 3 mg/m ³		-			STEL: 3 mg/m ³
Antimony	T	WA: 0.5 mg/m ³	TWA: 0.	5 mg/m ³	TWA: 0.5 mg/n	n ³	TWA: 0.5 mg/m ³
7440-36-0		-		-			-



Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.	
Appropriate engineering controls		
Engineering controls	Showers Eyewash stations Ventilation systems.	
Individual protection measures, su	ch as personal protective equipment	
Eye/face protection	Face protection shield.	
Hand protection	Wear suitable gloves. Impervious gloves.	
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash before reuse.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties Physical state Appearance Odor Color Odor Threshold	Solid Varies Odorless No information available No information available	
Property	Values	Remarks Method
рН	2	
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.27	
Water Solubility	Reacts with water	
Solubility(ies)	No data available	None known
Partition coefficient: n-octanol/wate	erNA	
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known



Dynamic viscosity	No data available	None known
Other Information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening Point	No information available	
Molecular Weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk Density	No information available	
Particle Size	No information available	
Particle Size Distribution	No information available	

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Oxidizing agent. Acids. Bases.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information In case of rupture:
Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Toxic by inhalation.
Eye contact	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Information on toxicological effects

Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing. Difficulty in breathing.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	624.00 mg/kg
ATEmix (inhalation-gas)	4,500.00 mg/L
ATEmix (inhalation-dust/mist)	0.66 mg/L
ATEmix (inhalation-vapor)	11.00 mg/L

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

26 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h
Antimony	= 7 g/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes burns.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Classification based on data available for ingredients. Contains a known or suspected carcinogen.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

	mietaler each agene) nac	noted any ingredient de d	saisinegen	
Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	A3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

Leaend

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor)



X - PresentReproductive toxicityClassification based on data available for ingredients. Contains a known or suspected
reproductive toxin. May cause harm to breastfed babies.STOT - single exposureNo information available.STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.Aspiration hazardNo information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to	Daphnia Magna (Wate
			Microorganisms	Flea)
Lead	-	96h LC50: = 0.44 mg/L	-	48h EC50: = 600 µg/L
		(Cyprinus carpio) 96h		
		LC50: = 1.17 mg/L		
		(Oncorhynchus mykiss)		
		96h LC50: = 1.32 mg/L		
		(Oncorhynchus mykiss)		
Sulfuric acid	-	96h LC50: > 500 mg/L	-	24h EC50: = 29 mg/L
		(Brachydanio rerio)		

Persistence and Degradability	No information available.
Bioaccumulation	There is no data for this product.
Mobility	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

US EPA Waste Number

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

 Chemical name
 RCRA - Halogenated Organic Compounds
 RCRA - P Series Wastes
 RCRA - F Series Wastes
 RCRA - K Series Wastes

 Antimony 7440-36-0
 Antimony 7440-36-0
 Toxic waste
 Waste number K021 Waste description: Aqueous spent antimony catalyst waste from fluoromethanes production.

D008 D002



California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive
Antimony	Toxic
7440-36-0	

14. TRANSPORT INFORMATION

DOT UN-No. Proper Shipping Name Hazard Class Description Emergency Response Guide Number	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8 154
<u>TDG</u> UN-No. Proper Shipping Name Hazard Class Marine Pollutant Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 This product contains a chemical which is listed as a marine pollutant according to TDG. UN2794, BATTERIES, WET, FILLED WITH ACID, 8
MEX UN-No. Proper Shipping Name Hazard Class Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8
ICAO UN-No. Proper Shipping Name Hazard Class Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 UN2794, BATTERIES, WET, FILLED WITH ACID, 8
IATA UN-No. Proper Shipping Name Hazard Class ERG Code Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 8L UN2794, BATTERIES, WET, FILLED WITH ACID, 8
IMDG/IMO UN-No. Proper Shipping Name Hazard Class EmS-No. Marine Pollutant Description	UN2794 BATTERIES, WET, FILLED WITH ACID 8 F-A, S-B This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO UN2794, BATTERIES, WET, FILLED WITH ACID, 8

<u>RID</u> UN-No. Proper Shipping Name Hazard Class Classification code Description ADR/RID-Labels	UN2794 BATTERIES, WET, FILLED WITH ACID 8 C11 UN2794, BATTERIES, WET, FILLED WITH ACID, 8 8
ADR	
UN-No.	UN2794
Proper Shipping Name	BATTERIES, WET, FILLED WITH ACID
Hazard Class Classification code	8 C11
Tunnel restriction code	(E)
Description	UN2794, BATTERIES, WET, FILLED WITH ACID, 8, (E)
ADN	
UN-No.	UN2794
Proper Shipping Name	BATTERIES, WET, FILLED WITH ACID
Hazard Class Classification code	8 C11
Special Provisions	295, 598
Description	UN2794, BATTERIES, WET, FILLED WITH ACID, 8
Hazard Labels	8
Limited Quantity	1 L

15. REGULATORY INFORMATION

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

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US Federal Regulations



<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS-No	Percent	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	70	0.1
Sulfuric acid - 7664-93-9	7664-93-9	26	1.0
Antimony - 7440-36-0	7440-36-0	4	1.0
· · · · · ·			

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	Х	
Sulfuric acid 7664-93-9	1000 lb			Х
Antimony 7440-36-0		Х	Х	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Antimony 7440-36-0	5000 lb 10 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65		
Lead - 7439-92-1	Carcinogen		
	Developmental		
	Female Reproductive		
	Male Reproductive		
Sulfuric acid - 7664-93-9	Carcinogen		

U.S. State Right-to-Know Regulations



1110599 - LEAD ACID BATTERY WET FILLED WITH ACID

Chemical name	New Jersey	Massachusett s	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	Х	Х	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties -	
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal Protection X	
Prepared By					
Issuing Date	20-Jul-201	20-Jul-2017			
Revision Date	20-Jul-201	20-Jul-2017			
Revision Note	No informa	ation available			

Disclaimer

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

End of Safety Data Sheet