

Centre Anti-Poison pour le Québec: (800) 463-5060 Tél. (Qc): (418) 660-8666 / 800-890-8666 Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier			Product Use		
AMMONIUM PERSULFATE 10%W/W			Laboratory use		
Chemical formula				Product code	Molar weight
(NH ₄) ₂ S ₂ O ₈				AS-0911	228,2
Chemical name / Commercia AMMONIUM PERSU		e d'ammonium,	DIAMMONIUM PER	OXYDISULFATE, DIAMMONI	IUM PERSULFATE
Supplier's name			Address-Street		
Laboratoire MAT		610, Adanac Street			
City		Province			
Québec		Québec			
Postal code	Internet	Internet		Phone number	
G1C 7B7 www.labmat.com		418-660-8666 / 800-890-8666			
Emergency phone	CANUTEC: 6	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS	•	SDS Prepared by	•	E-Mail	
11/24/2021 Laboratoire M		Laboratoire MA	T	labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS		
	Skin corrosion/i	rritation - Skin irritation category 2
	Respiratory or s	kin sensitization - Respiratory sensitizer category 1
	Respiratory or s	kin sensitization - Skin sensitize category 1
	Serious eye dar	nage/eye irritation - Eye irritation category 2
Signal Word	DANGER	
Hazards statements (H)	H315 Causes sk	in irritation.
	H317 May caus	se an allergic skin reaction.
	H319 Causes se	erious eye irritation.
	H334 May caus	e allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statements (P)	P261	Avoid breathing dust / fume / gas / mist / vapors / spray.
	P264	Wash the areas of the body that have been in contact with the product after handling.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 +	- P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P321	Specific treatment (see section 4 of the SDS and on this label).
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P501	Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
PICTOGRAMS		
Other dangers		NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health	1
	Fire	0
	Reactivity	1
	Special danger	
\sim		

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Persulfate d'ammonium	7727-54-0	10

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 1.5 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	If breathing is difficult, give oxygen. If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Asthma. Rhinitis. Skin sensitizer. Respiratory sensitizer. Breathing difficulties. Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Not flammable or combustible. Risk of fire or explosion if heated or crushed in presence of combustible products.
Suitable extinguishing media	Use water to extinguish the fire
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: - nitrogen oxides (NOx), Sulphur oxides
	The product in solution is not considered to be an oxidizer, but during a fire the water would evaporate, and the dry product would regain its oxidizing properties and could feed the flames. When concentrated, the product reacts according to the following characteristics: Powerful oxidizer Contact with combustible products may cause fire. Mixing ammonium persulfate in solution with aluminum or iron powder may cause an explosion. Dry salt can explode during drying due to the formation of tetra-amine zinc peroxodisulfate. Ammonium persulfate mixed with sodium peroxide may explode as a result of friction caused by grinding in a mortar; especially if heated above 75 ° C or in contact with carbon dioxide and drops of water. Catalytic decomposition can occur in the presence of certain metals such as: silver, cadmium, cobalt, copper, iron, magnesium, nickel, lead and zinc. Reacts violently with strong reducing agents. May react violently with incompatible products (Ref Section 10).
	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water,
containment and cleaning up /	clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal
Personnal precautions, protective	of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if
equipment	necessary. Do not use cellulose-based absorbent. Do not let product enter drains.

SECTION 07 - HANDLING AND STORAGE

Keep container tightly closed in a dry and well-ventilated place. Moisture sensitive. Keep container tightly closed and store away from heat, moisture, combustible and incompatible products.
Always open containers slowly to allow any excess pressure to vent. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Diammonium peroxodisulphate	7727-54-0	TWA	0.100000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks		Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required		
		TWAEV	0.100000 mg/m3	Canada. Ontario OELs
		TWA	0.100000 mg/m3	Canada. British Columbia OEL
		TWA	0.1 mg/m3	Canada. British Columbia OEL
		TWA	0.100000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	0.1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma)	
Ventilation	Fan.	
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.	
Gloves	Handle with gloves.	
Eyes	Safety goggles with safety shutters.	
Shoes	Safety shoes.	
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.	

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide incolore.
Odour	inodore.
Odour threshold	Data not available
рН	3.2 soln aqu. 100g/L.
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Solubility	Soluble dans l'eau.
Vapour density	Data not available
Relative density	1.05 g/ml (théorique).
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Oxidizer: risk of fire in case of contact with combustible / organic substance.	
Chemical stability	Moisture sensitive.	
Possibility of hazardous reactions	Oxidizer.	
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	This product may decompose if exposed to moisture from the air and water.	
Incompatible material	When pure, the product reacts with the following products: Strong reducing agents (potassium, sodium, hydrides of metals), ammonia and its solutions, fine metal powders (aluminum, silver, cadmium, cobalt, copper, iron, magnesium, nickel, lead, zinc), the sodium peroxide, water, heat and humidity. Chlorates. Perchloric acid.	
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions nitrogen oxides (NOx), Sulphur oxides Ammonia. Sulfuric acid.	

SECTION 11 - TOXICOLOGICAL INFORMATION

AMMONIUM PERSULFATE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burning may cause permanent eye damage.
- Skin	Severe irritation and tissue burns. May cause dermatitis.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus and abdominal wall. Dysphagia, abdominal pain, cramps, diarrhea, headache, melena, sweating, salivation, convulsions, stupor, unconsciousness, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, lung damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, tearing, confusion, irritability, sweating, salivation, fatigue, weight loss and loss of appetite, convulsions, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 689 mg/kg LD50 Dermal - Rat - 2000mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 2.95 mg/L.

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral: > 5000 mg/kg - Rat LD50 Dermal: > 5000 mg/kg - Rat LC50 Inhalation: 29.5mg/L - 4h - Rat

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Ammonium persulfate: Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 76 mg/l - 96 h. Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin irritation category 2
	Respiratory or skin sensitization - Respiratory sensitizer category 1
	Respiratory or skin sensitization - Skin sensitize category 1
	Serious eye damage/eye irritation - Eye irritation category 2

SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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