## **SAFETY DATA SHEET**



#### **AMMONIUM PERSULFATE**

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

1.1 Product identifier:	
CAS Number:	7727-54-0
EC number:	231-786-5
1.2 SYNONYMS:	<ul> <li>Ammonium Peroxydisulfate</li> <li>DiammoniumPeroxydisulphate</li> <li>Peroxydisulfuric acid</li> <li>diammonium salt</li> <li>Peroxydisulfurinc acid</li> </ul>
	ammonium salt

#### **SECTION 2: Hazards identification:**

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Acute Toxicity (oral) (Category 4) Skin Irritation (Category 2) Serious Eye Damage/Eye Irritation (Category 2) Respiratory sensitization (Category
VOID CHEMIC Hazard Pictograms:	Skin sensitization(Category 1) Specific Target Organ Toxicity (single Exposure) (Category 3) Oxidizing solids (Category 3)
Signal Word:	Danger
Hazard statements:	H302: Harmful if swallowed H315: Causes skin irritation H319: Causes serious eye irritation H317: May cause an allergic skin reaction



	<b>H334:</b> May cause allergy or asthma
	symptoms or breathing difficulties
	if inhaled
	<b>H335:</b> May cause respiratory
	irritation
FOTD	<b>H272</b> : May intensify fire; oxidizer
Precautionary Statements:	<b>P210:</b> Keep away from
LOID.	heat/sparks/open flames/hot
	surfaces No smoking
	<b>P220:</b> Keep/Store away from
	clothing/ combustible materials
	<b>P221:</b> Take any precaution to avoid
	mixing with combustibles
	<b>P261:</b> Avoid breathing dust/ fume/
	gas/ mist/ vapors/ spray
	<b>P264:</b> Wash face, hands and any
	exposed skin thoroughly after
	handling
	<b>P270:</b> Do not eat, drink or smoke
	when using this product
	<b>P272:</b> Contaminated work clothing
	should not be allowed out of the
	workplace ,
	<b>P280:</b> Wear protective gloves/
	protective clothing/ eye protection/
	face protection
	<b>P285</b> : In case of inadequate
	ventilation wear respiratory
	protection
	P301 + P312: IF SWALLOWED: Call a
	POISON CENTER or doctor/
	physician if you feel unwell <b>P330:</b> Rinse mouth
YOUR CHEMIC	<b>P302 + P352:</b> IF ON SKIN: Wash
I OUN ONLINE	with plenty of soap and water
	<b>P333 + P313:</b> If skin irritation or rash
	occurs: Get medical advice/
	attention
	<b>P362:</b> Take off contaminated
	clothing and wash before reuse
	<b>P305 + P351 + P338:</b> IF IN EYES:
	Rinse cautiously with water for
	several minutes. Remove contact
	Several Hilliates, Nerriove Cortact



ESTD.	lenses, if present and easy to do. Continue rinsing P337 + P313: If eye irritation persists: Get medical advice/ attention P304 + P341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician P403 + P233: Store in a well- ventilated place. Keep container tightly closed P405: Store locked up P501: Dispose of contents/ container to an approved waste disposal plant
2.3 Other hazards:	
Inhalation:	can cause respiratory irritation, coughing, and difficult breathing.
Ingestion:	May cause severe gastrointestinal irritation, nausea, vomiting, and abdominal pain.
Skin Contact:	an cause severe burns, irritation, and allergic reactions,
Eye contact:	May cause irritation, redness, pain and burning sensation.
YOUR CHEMIC	may lead to liver and kidney damage, as well as potential effects on the nervous system, and may increase the risk of cancer due to its classification as a suspected carcinogen.
Aggravation of pre-existing conditions:	may aggravate pre-existing conditions such as liver or kidney disease, respiratory disorders, and skin conditions like eczema or dermatitis.



## **SECTION 3: Composition/information on ingredients**

3.1 Chemical characterisation:	Substances
CAS No:	Description: 7727-54-0 AMMONIUM
	PERSULFATE
Identification number(s):	EC number: 231-786-5

# SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
After skin contact:	Wash with soap and water. Cover the irritated skin with an emollient. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. consult a physician.
After swallowing:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If large quantities swallowed, Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Itching; Redness; Coughing and/ or wheezing.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.



## **SECTION 5: Firefighting measures**

5.1 Extinguishing media:	Water Cool containers with flooding quantities of water until well after fire is out. Do not use carbon dioxide or other gas filled containers as it will have little effect on the ammonium persulfate.
5.2 Special hazards arising from the substance or mixture:	Decomposes under fire conditions to release oxygen that intensifies the fire.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device .
5.4 further information:	no data available

#### **SECTION 6: Accidental release measures**

6.1 Personal precautions,	Use personal protective
protective equipment and	equipment.
emergency procedures:	Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations.
6.2 Environmental precautions:	Knock down dust with water spray. Avoid penetration into waterways, sewers, soil or groundwater. Local authorities should be advised if significant spillages cannot be contained
6.3 Methods and material for containment and cleaning up:	Vacuum, shovel or pump waste into a drum and label contents for disposal. Avoid dust formation. Store in closed container. Clean up spill area and treat as special waste.



## **SECTION 7: Handling and storage**

7.1 Precautions for safe handling:  7.2 Conditions for safe storage, including any incompatibilities:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation. Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical
	damage and check regularly for leaks.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

# **SECTION 8: Exposure controls/personal protection**

8.1 Control parameters	
Additional information about	A system of local and general
design of technical facilities:	exhaust is recommended
8.2 Exposure controls	ALFANINEN
Appropriate engineering controls	Handle in accordance with good
	industrial hygiene and safety
	practice. Wash hands before
	breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks,
	wearing anti chemical gloves,
	rubber gloves, etc.
General protective and hygienic	Eyes, body and hand protection,
measures:	maintain indoor air unobstructed.
	Wear protective equipment.



	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

# **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical	
and chemical properties	
General Information	
Appearance: Form:	Crystalline Solid
Colour:	White
Odour:	Odourless
pH-value:	5.2
Melting point/Melting range:	120°C
Boiling point/Boiling range:	Not applicable
Flammability (solid, gaseous):	No data available
Ignition temperature:	Not applicable
Decomposition temperature:	100°C
Self-igniting:	Not applicable
Flash point:	Not flammable
Danger of explosion:	Not applicable
<b>Explosion limits: Lower:</b>	No data available
<b>Explosion limits: Upper:</b>	No data available
Vapour pressure:	No data available
Density at 20 °C:	No data available
Relative density:	No data available
Vapour density:	No data available
<b>Evaporation rate:</b>	No data available
Solubility in / Miscibility with-	850 g/L @ 25 °C
·water at 20 °C:	



Partition coefficient:(n- octanol/water)	No data available
Viscosity:	No data available

## **SECTION 10: Stability and reactivity**

10.1 Departivity	Ctrop a ovidizor
10.1 Reactivity	Strong oxidizer
10.2 Chemical stability	Use of persulfates in chemical
	reactions requires appropriate
	precautions and design
	considerations
	for pressure and thermal relief
10.3 Possibility of hazardous	Decomposing persulfates will
reactions	evolve large volumes of gas and/or
	vapor, can accelerate exponentially
	with heat generation, and create
	significant and hazardous
	pressures if contained and not
	properly
	controlled or mitigated.
10.4 Conditions to avoid	Heat. (decomposes at 275 °C). Moist
10.5 Incompatible materials	Strong oxidizing agents.
10.6 Hazardous decomposition	Oxygen which supports
products	combustion; Sulfur oxides.

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects	AL DADTMED
Acute Toxicity:	LD50 (Oral, Rat): 740 mg/kg LD50 (Dermal, Rabbit): 2000,g/kg LC50 (Inhalation Rat): 2.95 mg/m3 4 hours
Skin corrosion/Irritation:	Irritating to skin Persulfates in general, specifically diammonium persulfate and dipotassium persulfate.
Serious eye damage/irritation:	can cause serious eye damage and severe irritation.
Respiratory damage/irritation:	may cause respiratory irritation



Ingestion:	may cause nausea, vomiting,
	abdominal pain
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	no data available
Specific target organ toxicity -	No data available
single exposure:	IY/h

Specific target organ toxicity -	No data available
repeated exposure:	
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological	
information	
Biodegradability:	Not readily biodegradable

# **SECTION 12: Ecological information**

12.1 Toxicity Aquatic toxicity:	LC50 (onchorhynchus mykiss): 76.3 mg/L (96 hr) LC50 (scophlathalmus maximus): 107.6 mg/L (96 hr) EC50 (daphnia magna): 635.7 mg/L (48 hr)
12.2 Persistence and	Biodegradability does not pertain
degradability:	to inorganic substances
12.3 Bioaccumulative potential:	Not bioaccumulative
12.4 Mobility in soil:	Dissociates into ions.
12.5 Other adverse effects:	No data available

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	water, sodium thiosulfate, and sodium carbonate,



#### **SECTION 14: Transport information**

14.1 UN-Number · ADR, ADN, IMDG, IATA:	UN 1444
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	AMMONIUM PERSULFATE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA:	5.1
14.4 Packing group · ADR, IMDG, IATA:	3
14.5 Environmental hazards:	No data available
Additional information:	This material is shipped in 225 lb. fiber drums, 55 lb. poly bags and 1000 - 2000 lb. IBC's (supersacks)
14.6 Special precautions for user:	Handle responsibly.

#### **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is classified as a strong oxidizer.
Named dangerous substances:	This substance is listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has been carried out under <b>REACH</b> regulation.

#### **SECTION 16: Other information**

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.