Sodium Sulphate Anhydrous (MCISSA)

Issue Date 15-May-2020 Revision Date 14-May-2020

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name	**Sodium Sulphate Anhydrous**		
Chemical Name	CAS No	EC No REACH	Registration Number
Sodium Sulphate	7757-82-6	231-820-9	01-2119519226-43-0010

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

Industrial Industrial manufacturing. Manufacture of substances. Distribution and storage. Formulations. Use: as a detergent, as an intermediate including transfers and lab activities, in laboratories (small scale), in non-spraying formulations, in spraying formulations, in syntheses as a process chemical (not as a reactant)

Professional Use: as a detergent, in laboratories (small scale), in non-spraying formulations, in spraying formulations

Consumer Use: in cardboard, in consumer products (private household uses) Uses advised against Not identified.

1.3. Details of the supplier of the safety data sheet

Manufacturer

METRO CHEM INDUSTRIES.

Plant: Plot No. 407, 408 Phase II, Vatva G. I. D. C. Industrial Estate, Vatva, Ahmedabad Gujarat 382 445 INDIA

E-mail: export@metrochemgroup.com

1.4. Emergency telephone number

TEL: + 91 70452 69159

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This substance is not classified as dangerous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This substance is not classified as dangerous according to regulation (EC)1272/2008 [CLP]

Symbols/Pictograms Not applicable

Signal word None

Hazard statements Not applicable

Precautionary Statements Not applicable

2.3. Other hazards

None known. This substance does not meet the criteria for classification as PBT or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC No	CAS No	REACH Registration Number	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium sulphate	231-820-9	7757-82-6	6 01-2119519226-43-0010	>99	Not classified

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation First aid measures not required, but get fresh air for personal comfort.

Skin contact First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.

Eye contact First aid measures not required, but rinse opened eye under running water for personal comfort to avoid mechanical irritation.

Ingestion If a large quantity has been ingested or if you feel unwell, get medical advice/attention.

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

None known

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

Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Not combustible. All types of extinguishing media are suitable. Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable extinguishing media

Water with full jet as this can form a dust cloud.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous combustion products Carbon monoxide (CO), Carbon dioxide (CO2), Sulphur dioxide (SO2).

5.3. Advice for firefighters

No special protective equipment required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

If dusty conditions wear respiratory protective device with dust filter, gloves, and protective clothing for hygienic reasons.

6.2. Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional ecological information.

6.3. Methods and material for containment and cleaning up

Methods for containment

Cover to prevent dust formation. Take up mechanically, placing in appropriate containers for disposal.

Methods for cleaning up

Vacuum or sweep up material and place in a designated, labelled waste container. After cleaning, flush away traces with water.

6.4. Reference to other sections

See Section 7, 8, 13 for more information

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not inhale dust. Avoid generation of dust. Provide adequate ventilation as well as local exhaustion at critical locations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry and cool place.

7.3. Specific end use(s)

This information is supplied in the present Safety Data Sheet

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Keep personal exposure levels below Derived No Effect Level (DNEL) and national exposure limit values (if existing).

Dust; respirable dust, TWA: 4 mg/m^3

Dust; inhalable dust, TWA: 10 mg/m^3

Workplace Exposure Limits (WELs) (EH40/2005)

Derived No Effect Level (DNEL) – worker

Sodium sulphate (7757-82-6)			
Type	Exposure route	DNEL	Remarks
Chronic effects, local	Inhalation	20	mg/m^3
Chronic effects, systemic	Inhalation	20	mg/m^3

Derived No Effect Level (DNEL) - Consumer

Sodium sulphate (7757-82-6)			
Type	Exposure route	DNEL	Remarks
Chronic effects, local	Inhalation	12	mg/m^3
Chronic effects, systemic	Inhalation	12	mg/m^3

Predicted No Effect Concentration (PNEC)

Sodium sulphate (7757-82-6)		
Environmental compartment	Predicted No Effect Concentration (PNEC)	Remarks
Freshwater	11.09	mg/l
Freshwater sediment	40.2	mg/kg dry weight
Marine water	1.109	mg/l
Marine sediment	4.02	mg/kg dry weight
Impact on Sewage Treatment	800	mg/l
Soil	1.54	mg/kg dry weight

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation.

Eye/face protection — Wear safety glasses with side shields (or goggles).

Hand Protection — Protective gloves not really required. However, we recommend using protective glove made of rubber. Chloroprene rubber, CR. Nitrile rubber NBR

Skin and body protection — Normal work clothes for the chemical industry.

Respiratory protection — Wear respiratory device with dust filter (P3) in case of insufficient ventilation.

Environmental exposure controls
Not applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance
powder
crystalline
white

Odour	Odourless
Odour threshold	Not applicable

Property	**Value**	**Remarks • Method**
pH	>4	solution (10 %)
Melting point / freezing point	884-886 °C	
Boiling point / boiling range	> 1700 °C	
Flash point		Not applicable
Evaporation rate		No information available
Flammability (solid, gas)		Not flammable
Explosive limits		
Upper explosive limits		Not applicable
Lower explosive limits		Not applicable
Vapour pressure		Not applicable
Vapour density		No information available
Relative density		No information available
Water solubility	445.5 g/L	@ 20 °C, OECD Test No. 105: Water Solubility
Solubility(ies)		No information available
Partition coefficient	-4.38	log POW (EPI Suite)
Autoignition temperature	> 400 °C	Regulation (EC) No. 440/2008, Annex, A.16
Decomposition temperature		Not determined
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties	Not explosive.	
Oxidising properties	Not oxidising.	
Density	2.7 g/cm3 @	20 °C
Bulk density	1450 kg/m3	@ 20 °C

9.2. Other information
No information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Contact of melted Sodium sulphate (melting point 884°C) with aluminium will cause violent reactions (formation of Al2O3, Na2O and SO2/SO3-gas). Danger of explosion!

10.4. Conditions to avoid
Avoid contact with water or humidity. The product is: Hygroscopic.

10.5. Incompatible materials
See above.

10.6. Hazardous decomposition products
Thermal decomposition can lead to release of toxic/corrosive gases and vapours; Sulphur dioxide (SO2), Carbon monoxide (CO), Carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure
Inhalation, Dermal.

Symptoms related to the physical, chemical and toxicological characteristics
None known.

Numerical measures of toxicity
Acute toxicity

Product does not present an acute toxicity hazard based on known or supplied information.

Sodium sulphate (7757-82-6)				
Method	Species	Exposure route	Effective dose	Remarks
Unknown	Mouse	Oral	5989	LD50 (lethal dose) mg/kg
OECD Test No. 423: Acute Oral toxicity - Acute Toxic Class Method	Rat	Oral	>2000	LD50 (lethal dose) mg/kg
OECD Test No. 436	Rat	Inhalation	>2.4	LC50 /4h, dust mg/l Maximum attainable concentration

Skin corrosion/irritation
Non-irritating to the skin.

Sodium sulphate (7757-82-6)

Method	Species	Exposure route	Results:
OECD Test No. 404: Acute Dermal Irritation/Corrosion	rabbit	Dermal	Non-irritating to the skin

Serious eye damage/eye irritation

Slightly irritating but not relevant for classification.

Sodium sulphate (7757-82-6)			
Method	Species	Exposure route	Results:
Regulation (EC) No. 440/2008, Annex, B.5	rabbit	Eye	Slightly irritating. No classification according to GHS criteria.

Respiratory or skin sensitisation

Not a skin sensitiser.

Sodium sulphate (7757-82-6)			
Method	Species	Exposure route	Results:
OECD Test No. 406: Skin Sensitisation	Guinea pig	Skin	Not sensitising.

Germ cell mutagenicity

Not mutagenic.

Sodium sulphate (7757-82-6)		
Method	Species	Results:
Regulation (EC) No. 440/2008, Annex, B.13/14 (Ames test)	in vitro	Negative
OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test	in vitro	Negative
OECD Test No. 476: In vitro Mammalian Cell Gene Mutation Test	in vitro	Negative

Carcinogenicity

There is no indication for any carcinogenic potential since all in vitro mutagenicity studies are negative.

Reproductive toxicity

Is not considered hazardous to the reproduction.

Sodium sulphate (7757-82-6)				
Method	Species	Exposure route	Effective dose	Remarks
OECD Test No. 421: Reproduction/Developmental Toxicity Screening Test	Rat	Oral	1000	P0; NOAEL mg/kg bw/d No impairment of fertility has been observed.

OECD Test No. 421: Reproduction/Developmental Toxicity Screening Test	Rat	Oral	1000	F1; NOAEL mg/kg bw/d No embryotoxic or teratogenic effects have been observed.
Test type Developmental Toxicity	Mouse	Oral	2800	NOAEL mg/kg bw/d no maternal toxicity
Test type Developmental Toxicity	Mouse	Oral	2800	NOAEL mg/kg bw/d No embryotoxic or teratogenic effects have been observed.

STOT - single exposure No known effect
STOT - repeated exposure

Sodium sulphate (7757-82-6)				
Method	Species	Exposure route	Effective dose	Remarks
OECD Test No. 421: Reproduction/Developmental Toxicity Screening Test	Rat	Oral	1000	NOAEL mg/kg bw/d No toxicity
One-Generation Reproduction Toxicity Study	Pig	Oral	3320	P0, F1; NOAEL, mg/kg bw/d

SECTION 12: Ecological information

12.1. Toxicity
Low toxicity to aquatic organisms.

Sodium sulphate (7757-82-6)					
Method	Species	Exposure route	Effective dose	Exposure time	Remarks
EPA/600/4-90/027	Pimephales promelas	Freshwater	7960	96h	LC50 (lethal concentration) mg/l
EPA 600/R-94/024	Daphnia magna	Freshwater	1766	48h	EC50 (effective concentration) mg/l
Not defined	Nitzschia sp. (F110)	Freshwater	1900	120h	EC50 (effective concentration) mg/l
Test type Activated sludge	Bacteria toxicity	Freshwater	26	37d	NOEC g/l

12.2. Persistence and degradability
Does not biodegrade, inorganic substance.

12.3. Bio accumulative potential
No bioaccumulation potential.

Chemical Name	Partition coefficient	Bioconcentration factor (BCF)
Sodium Sulphate	**-4.38**	**0.5**

12.4. Mobility in soil
The substance is not expected to adsorb to a high degree to suspended solids and sediment based upon the log Pow.

12.5. Results of PBT and vPvB assessment
This substance does not meet the criteria for classification as PBT or vPvB
12.6. Other adverse effects
No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from residues/unused products
The product is not classified as hazardous waste. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Contaminated packaging
Not applicable.

Waste codes / waste designations according to EWC / AVV
Waste from residues/unused products; 16 03 06.

Other Information
Waste codes should be assigned by the user based on the application for which the product was us

SECTION 14: TRANSPORT INFORMATION

ADR Road transport
14.1 UN number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
Subsidiary class
14.4 Packing Group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special precautions for user None

RID Rail transport
14.1 UN number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
Subsidiary hazard class –
14.4 Packing Group Not regulated

14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	None

IMDG Sea transport

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

IATA Air transport	Not regulated
14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	None

SECTION 15: REGULATORY INFORMATION

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

International Regulations

Not applicable.

European Union

France

Occupational Illnesses (R-463-3, France) Not applicable

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried

SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Issue Date	15-May-2020
Revision Date	14-May-2020
Revision Note	SDS sections updated; 8 National occupational exposure limits, 11 One-Generation Reproduction Toxicity Study

Disclaimer

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