

Creation Date Oct-2013

Revision Date Oct-2018

Revision Number 2

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

1.1. Product identification

Product Description:	Calcium acetate
Product Grade:	SQ
Cat No. :	Q2213DSCS,Q2213D,Q22145,Q2214D
Synonyms	Acetic acid, calcium salt
CAS-No	62-54-4
EC-No.	200-540-9
Molecular Formula	C4 H6 C aO4

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

Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

1.3. Details of the supplier of the safety data sheet

Company	Thermo Fisher Scientific India Pvt. Ltd
	403-404, B-wing, Delphi, Hiranandani Business Park,
	Powai, Mumbai 400076, INDIA.
E-mail address	laboratorysolutions@thermofisher.com

1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30 Chemtrec US: (800) 424-9300 Chemtrec EU: 001 (202) 483-7616

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

2.2. Label elements

Hazard Statements

Precautionary Statements

2.3. Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Calcium acetate	62-54-4	EEC No. 200-540-9	>95	-

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting. Drink plenty of water. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.
Protection of First-aiders	No special precautions required.
4.2. Most important symptoms and	effects, both acute and delayed

No information available.

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

Notes to Physician

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂), Calcium oxides.

5.3. Advice for firefighters

Calcium acetate

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits List source(s):

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Calcium acetate	Skin notation MAC: 2 mg/m ³				

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of

Calcium acetate

exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Route of exposure	Acute effects (local)	Acute effects	Chronic effects	Chronic effects
		(systemic)	(local)	(systemic)
Oral Dermal		69.44 mg/kg bw/d		11.57 mg/kg bw/d
Inhalation		6121.68 mg/m ³		1020.28 mg/m ³
redicted No Effect Concentratior PNEC)	See values below.			
Fresh water	0.964 mg/l Fresh			
	26 mg/kg dw Marine 64 mg/l Marine			
	26 mg/kg dw			
Microorganisms in sewage	700 mg/l			
treatment	-			
Soil (Agriculture)	0.154 mg/kg dw			
2. Exposure controls				
ngineering Measures lone under normal use conditions.				
Personal protective equipment Eye Protection	Safety glasses with si	de-shields (European s	tandard - EN 166)	
Hand Protection	Protective gloves	Υ Γ	,	
	ough time Glove thick			comments
Nitrile rubber See man	ufacturers -	ness EU standard EN 374		comments n requirement)
Nitrile rubber See man Neoprene recommo				
Nitrile rubber See man	ufacturers -			
Nitrile rubber See man Neoprene recommo Natural rubber PVC	ufacturers - endations	EN 374	(minimur	n requirement)
Nitrile rubber See man Neoprene recomme Natural rubber PVC Skin and body protection	ufacturers - endations		(minimur	n requirement)
Nitrile rubber See man Neoprene recomme Natural rubber PVC Skin and body protection spect gloves before use.	ufacturers - endations Wear appropriate prot	EN 374	(minimur ng to prevent skin expo	n requirement) osure
Nitrile rubber See man Neoprene recomme Natural rubber PVC Skin and body protection spect gloves before use. lease observe the instructions rega	ufacturers - endations Wear appropriate prot	EN 374	(minimur ng to prevent skin expo	n requirement) osure
Nitrile rubber See man Neoprene recomme Natural rubber PVC Skin and body protection Ispect gloves before use. lease observe the instructions rega Refer to manufacturer/supplier for ir	ufacturers - endations Wear appropriate prot irding permeability and br iformation)	EN 374 ective gloves and clothi	(minimur ng to prevent skin expo are provided by the su	n requirement)
Nitrile rubber See man Neoprene recommon PVC Skin and body protection spect gloves before use. lease observe the instructions rega Refer to manufacturer/supplier for ir nsure gloves are suitable for the tag	ufacturers - endations Wear appropriate prot ording permeability and br offormation) sk: Chemical compatabili	EN 374 fective gloves and clothi reakthrough time which i ty, Dexterity, Operationa	(minimur ng to prevent skin expo are provided by the sup al conditions, User sus	n requirement)
Nitrile rubber See man Neoprene recomme Natural rubber PVC Skin and body protection spect gloves before use. lease observe the instructions rega Refer to manufacturer/supplier for ir nsure gloves are suitable for the tag ensitisation effects, also take into car i cuts, abrasion.	ufacturers - endations Wear appropriate prot inding permeability and br information) sk: Chemical compatabili onsideration the specific l	EN 374 fective gloves and clothi reakthrough time which i ty, Dexterity, Operationa	(minimur ng to prevent skin expo are provided by the sup al conditions, User sus	n requirement)
Nitrile rubber See man Neoprene recomme Natural rubber PVC Skin and body protection nspect gloves before use. Please observe the instructions rega Refer to manufacturer/supplier for ir insure gloves are suitable for the tagen ensitisation effects, also take into car f cuts, abrasion.	ufacturers - endations Wear appropriate prot inding permeability and br information) sk: Chemical compatabili onsideration the specific l	EN 374 fective gloves and clothi reakthrough time which i ty, Dexterity, Operationa	(minimur ng to prevent skin expo are provided by the sup al conditions, User sus	n requirement)
Nitrile rubber See man Neoprene recommo Natural rubber PVC	ufacturers - endations Wear appropriate prot ording permeability and br offormation) sk: Chemical compatabili onsideration the specific l kin contamination.	EN 374 fective gloves and clothi reakthrough time which i ty, Dexterity, Operationa	(minimur ng to prevent skin expo are provided by the su al conditions, User sus hich the product is use	n requirement)
Nitrile rubber Neoprene See man recomme Natural rubber PVC PVC Skin and body protection aspect gloves before use. lease observe the instructions rega Refer to manufacturer/supplier for ir nsure gloves are suitable for the tage ensitisation effects, also take into confecuts, abrasion. temove gloves with care avoiding slow Respiratory Protection	ufacturers - endations - Wear appropriate prot ording permeability and br formation) sk: Chemical compatability onsideration the specific l kin contamination. No protective equipme Use a NIOSH/MSHA of are exceeded or if irrit	EN 374 eective gloves and clothine eakthrough time which a ty, Dexterity, Operationa ocal conditions under w ent is needed under nor or European Standard E cation or other symptom	(minimur ng to prevent skin expo are provided by the sup al conditions, User sus hich the product is use mal use conditions.	n requirement) osure oplier of the gloves. ceptibility, e.g. ed, such as the danger
Nitrile rubber Neoprene Natural rubber PVC Skin and body protection aspect gloves before use. lease observe the instructions rega Refer to manufacturer/supplier for ir nsure gloves are suitable for the ta- ensitisation effects, also take into co f cuts, abrasion. emove gloves with care avoiding sl Respiratory Protection arge scale/emergency use	ufacturers - endations - Wear appropriate prot ording permeability and br formation) sk: Chemical compatabili onsideration the specific l kin contamination. No protective equipme Use a NIOSH/MSHA of	EN 374 eective gloves and clothine eakthrough time which a ty, Dexterity, Operationa ocal conditions under w ent is needed under nor or European Standard E cation or other symptom r type: Particle filter	(minimur ng to prevent skin expo are provided by the sup al conditions, User sus hich the product is use mal use conditions.	n requirement) osure oplier of the gloves. ceptibility, e.g. ed, such as the danger
Nitrile rubber Neoprene See man recomme Natural rubber PVC PVC Skin and body protection aspect gloves before use. lease observe the instructions rega Refer to manufacturer/supplier for ir nsure gloves are suitable for the tax ensitisation effects, also take into construction f cuts, abrasion. temove gloves with care avoiding sl Respiratory Protection arge scale/emergency use mall scale/Laboratory use	ufacturers endations Wear appropriate prot ording permeability and br formation) sk: Chemical compatability onsideration the specific l kin contamination. No protective equipment Use a NIOSH/MSHA of are exceeded or if irrit Recommended Filte Maintain adequate ver	EN 374 eective gloves and clothine eakthrough time which a ty, Dexterity, Operationa ocal conditions under w ent is needed under nor or European Standard E cation or other symptom r type: Particle filter	(minimur ng to prevent skin exp are provided by the sup al conditions, User sus thich the product is use mal use conditions. EN 136 approved respin s are experienced	n requirement) osure oplier of the gloves. ceptibility, e.g. ed, such as the danger
Nitrile rubber See man Neoprene recomme PVC Skin and body protection Please observe the instructions rega Refer to manufacturer/supplier for ir insure gloves are suitable for the ta- ensitisation effects, also take into co f cuts, abrasion. Remove gloves with care avoiding sl	ufacturers endations Wear appropriate prot ording permeability and br formation) sk: Chemical compatability onsideration the specific l kin contamination. No protective equipment Use a NIOSH/MSHA of are exceeded or if irrit Recommended Filte Maintain adequate ver	EN 374 eective gloves and clothine eakthrough time which a ty, Dexterity, Operationa ocal conditions under w ent is needed under nor or European Standard E cation or other symptom r type: Particle filter ntilation	(minimur ng to prevent skin exp are provided by the sup al conditions, User sus thich the product is use mal use conditions. EN 136 approved respin s are experienced	n requirement) osure oplier of the gloves. ceptibility, e.g. ed, such as the danger

9.1. Information on basic physical and chemical properties

Appearance	White
Physical State	Solid

Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	mild No data available 7.6 @ 20°C No data available No data available No information available No data available Not applicable No information available No data available	Method - No information available Solid
Vapor Pressure	No data available	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	No data available	
Bulk Density	~ 430 kg/m ³	
Water Solubility	soluble	@ 20 °C
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/wat	ter)	
Autoignition Temperature		
Decomposition Temperature	> 160°C	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	
9.2. Other information	24112.2.24	

Molecular Formula Molecular Weight C4 H6 C aO4 158.17

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	None known, based on information available
<u>10.2. Chemical stability</u>	Hygroscopic
<u>10.3. Possibility of hazardous reaction</u>	<u>ons</u>
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.
10.4. Conditions to avoid 10.5. Incompatible materials	Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water. Strong oxidizing agents. Acids.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂). Calcium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

(a) acute toxicity; Oral Dermal

Based on available data, the classification criteria are not met No data available

Calcium acetate

Inhalation	No data available		
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium acetate	4280 mg/kg (Rat)		
(b) skin corrosion/irritation;	No data available		
(c) serious eye damage/irritation;	No data available		
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available		
(e) germ cell mutagenicity;	No data available		
(f) carcinogenicity;	No data available		
	There are no known carcinoge	nic chemicals in this product	
(g) reproductive toxicity;	No data available		
(h) STOT-single exposure;	No data available		
(i) STOT-repeated exposure;	No data available		
Target Organs	No information available.		
(j) aspiration hazard;	Not applicable Solid		
Symptoms / effects,both acute and delayed	No information available		

SECTION 12: ECOLOGICAL INFORMATION

<u>12.1. Toxicity</u> Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
<u>12.2. Persistence and degradability</u> Persistence	Readily biodegradable Soluble in water, Persistence is unlikely, based on information available.
12.3. Bioaccumulative potential	Bioaccumulation is unlikely
<u>12.4. Mobility in soil</u>	The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils
12.5. Results of PBT and vPvB assessment	No data available for assessment.
<u>12.6. Other adverse effects</u> Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.		
Contaminated Packaging	Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.		
European Waste Catalogue (EWC)	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.		
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.		
SECTION 14: TRANSPORT INFORMATION			

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Calcium acetate

Not regulated

<u>14.1. UN number</u> 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group</u>

<u>ADR</u>

Not regulated

<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u>

<u>IATA</u>

Not regulated

<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u>

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Not applicable, packaged goods Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

International Inventories		X = listed	l								
Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Calcium acetate	200-540-9	-		Х	Х	-	Х	Х	Х	Х	Х

National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Calcium acetate	WGK 1	

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at

work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full Text of H-/EUH-Statements Referred to Under Section 3

Le	egend_
CAS - Chemical Abstracts Service	TSCA - United States Toxic Substances Control Act Section 8(b)
	Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemica Substances/EU List of Notified Chemical Substances	I DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemical Substances	ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances	AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances	NZIOC - New Zealand Inventory of Chemicals
WEL - Workplace Exposure Limit	TWA - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists	IARC - International Agency for Research on Cancer
DNEL - Derived No Effect Level	PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment	LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%	EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration	POW - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative, Toxic	vPvB - very Persistent, very Bioaccumulative
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road	ICAO/IATA - International Civil Aviation Organization/International Air Transport Association
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code	MARPOL - International Convention for the Prevention of Pollution from Ships
OECD - Organisation for Economic Co-operation and Development	ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor	VOC - Volatile Organic Compounds
Key literature references and sources for data	

Key literature references and sources for data Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Creation Date	Oct-2013
Next Revision Date	Oct-2023
Revision Summary	SDS section 1 updated and update of Format

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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