

SAFETY DATA SHEET

Revision Date 18-Jan-2018

Revision Number 3

	1. Identification
Product Name	Chelidonic acid monohydrate
Cat No. :	AC154600000; AC154600050; AC154600250
Synonyms	4-Oxo-4H-pyran-2,6-dicarboxylic acid
Recommended Use Uses advised against Details of the supplier of the safety	Laboratory chemicals. Food, drug, pesticide or biocidal product use. data sheet
<u>Company</u> Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system.

Category 2 Category 3

Category 2

Label Elements

Signal Word Warning

Hazard Statements

Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

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

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component		CAS-No	Weight %	
Chelidonic acid monohydr	ate	6003-94-7	>95	
	4.	First-aid measures		
General Advice	If symptoms p	persist, call a physician.		
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.			
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.			
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.			
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.			
Most important symptoms and effects	None reason	ably foreseeable.		
Notes to Physician	Treat sympto	matically		

5. Fire-fighting measures

Suitable	Extinguishing	Media
ountable	Extinguioning	mound

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media	No information available
Flash Point Method -	No information available No information available
Autoignition Temperature Explosion Limits	No information available
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

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

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<u>NFPA</u>	Health 2	Flammability 1	Instability 0	Physical hazards N/A			
		6. Accidental re	lease measures				
Personal	Precautions	Ensure adequate ventilation formation.	on. Use personal protective equ	ipment as required. Avoid dust			
Environm	ental Precautions	Should not be released internation.	o the environment. See Section	n 12 for additional Ecological			
Methods Up	for Containment and C	lean Sweep up and shovel into containers for disposal.	suitable containers for disposa	I. Keep in suitable, closed			
	7. Handling and storage						
Handling	HandlingWear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.						
Storage		Keep containers tightly clo	Keep containers tightly closed in a dry, cool and well-ventilated place.				
	8.	Exposure controls	/ personal protecti	on			
Exposure	<u>Guidelines</u>		ain any hazardous materials w gion specific regulatory bodies.				
Engineeri	ing Measures	Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.					
<u>Personal</u>	Protective Equipment						
Eye/fa	ace Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard					

	EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	No protective equipment is needed under normal use conditions.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

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Physical State	Solid
Appearance	Beige
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	265 °C / 509 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C7 H4 O6 . H2 O
Molecular Weight	202.12

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat. Avoid dust formation.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information	No acute toxicity information is available for this product
Toxicologically Synergistic Products	No information available
	ell as chronic effects from short and long-term exposure
Irritation	No information available

Sensitization

No information available

Carcinogenicity

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Component Chelidonic acid	6003-94-7	Not listed	Not listed	Not listed	Not listed	Not listed
monohydrate Iutagenic Effects		No information ava	l ailable		I	
eproductive Effect	S	No information ava	ailable.			
Developmental Effe	cts	No information ava	ailable.			
Feratogenicity		No information ava	ailable.			
STOT - single expos STOT - repeated exp		Respiratory syster None known	n			
Aspiration hazard		No information ava	ailable			
Symptoms / effects,both acute and No information available delayed						
Endocrine Disruptor Information No information available						
Other Adverse Effects The toxicological properties have not been fully investigated.						
		12. Ecol	ogical infor	mation		
<u>Ecotoxicity</u> Do not empty into dra	ains.					
Persistence and Deg	gradability	No information ava	ailable			
Bioaccumulation/ Accumulation No information available.						
Mobility		No information available.				
		13. Dispo	sal conside	erations		
Waste Disposal Met	hods	hazardous waste.	Chemical waste g	enerators must als	discarded chemica so consult local, reg ete and accurate cl	gional, and

	14. Transport information
DOT	Not regulated
DOT TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
	15. Regulatory information

United States of America Inventory

Compone	ent	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Chelidonic acid me	onohydrate	6003-94-7	-	-	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710) X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Chelidonic acid monohydrate	6003-94-7	-	-	-	-	-	-	-	-

U.S. Federal Regulations

SARA 313	Not applicable				
SARA 311/312 Hazard Categories	See section 2 for more information				
CWA (Clean Water Act)	Not applicable				
Clean Air Act	Not applicable				
OSHA - Occupational Safety and Health Administration	Not applicable				
CERCLA	Not applicable				
California Proposition 65	This product does not contain any Proposition 65 chemicals.				
U.S. State Right-to-Know Regulations	Not applicable				
U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N				
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.				
Other International Regulations					
Mexico - Grade	No information available				

	16. Other information
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Revision Date Print Date Revision Summary	18-Jan-2018 18-Jan-2018 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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