

SAFETY DATA SHEET

Revision Date 26-May-2017

Revision Number 2

1. Identification Product Name (S)-(+)-Ibuprofen Cat No. : AC333200000; AC333200010; AC333200050 Synonyms (2S)-2-[4-(2-Methylpropyl)phenyl]propionic acid Recommended Use Laboratory chemicals. Uses advised against Not for food, drug, pesticide or biocidal product use Details of the supplier of the safety data sheet Company

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)

Acute oral toxicity Reproductive Toxicity

Category 4 Category 2

Label Elements

Signal Word Warning

Hazard Statements

Harmful if swallowed Suspected of damaging the unborn child



Precautionary Statements Prevention Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product **Response** IF exposed or concerned: Get medical attention/advice **Ingestion** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth **Storage** Store locked up **Disposal** Dispose of contents/container to an approved waste disposal plant **Hazards not otherwise classified (HNOC)** None identified

3.	Composition	/ information or	n ingredients

Component		CAS-No	Weight %			
Propanoic acid, 2-(4-isobutylphen	yl)-, S(+)-	51146-56-6	>95			
	4.	First-aid measures				
Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.						
Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.						
Inhalation Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. I not breathing, give artificial respiration. Obtain medical attention.						
Ingestion Clean mouth with water. Get medical attention.						
lost important symptoms/effectsNo information available.otes to PhysicianTreat symptomatically						
	5. Fi	re-fighting measures				
Suitable Extinguishing Media		Carbon dioxide (CO 2). Dry chemical. C	hemical foam.			
Unsuitable Extinguishing Media	Unsuitable Extinguishing Media No information available					
Flash Point > 113 °C / > 235.4 °F						
Method - No information available						
Autoignition Temperature Explosion Limits						
Upper	No data avail					
Lower Sensitivity to Mechanical Impact	No data avail					
Sensitivity to Mechanical Impact	No informatio					

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	Flammability	Instability	Physical hazards N/A				
	2	-	-	N/A				
		6. Accidental rel						
	Precautions ental Precautions	Ensure adequate ventilation See Section 12 for additiona	 use personal protective equal ecological information. 	ipment.				
Methods fo Up	or Containment and Cle	an Sweep up or vacuum up spi	illage and collect in suitable co	ntainer for disposal.				
		7. Handling a	and storage					
Handling		Do not breathe dust. Do not handling.	get in eyes, on skin, or on clo	thing. Wash thoroughly after				
Storage		Keep container tightly close	d in a dry and well-ventilated p	blace. Keep refrigerated.				
8. Exposure controls / personal protection								
Exposure	<u>Guidelines</u>		in any hazardous materials wi on specific regulatory bodies.	th occupational exposure				
Engineerir	ng Measures		n, especially in confined areas. se to the workstation location.	Ensure that eyewash stations				
Personal F	Protective Equipment							
Eye/fac	ce Protection		e eyeglasses or chemical safet ction regulations in 29 CFR 19	y goggles as described by 10.133 or European Standard				
Skin a	nd body protection	Wear appropriate protective	gloves and clothing to prever	t skin exposure.				
Respir	atory Protection	EN 149. Use a NIOSH/MSH	regulations found in 29 CFR f IA or European Standard EN f ed or if irritation or other sympt					
Hygien	ne Measures	Handle in accordance with g	good industrial hygiene and sa	fety practice.				

Physical and chemical properti	9.	Physica	l and	chemical	propertie
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Physical State	Solid	
Appearance	White	
Odor	No information available	
Odor Threshold	No information available	
рН	No information available	
Melting Point/Range	49 - 53 °C / 120.2 - 127.4 °F	
Boiling Point/Range	No information available	
Flash Point	> 113 °C / > 235.4 °F	
Evaporation Rate	Not applicable	
Flammability (solid,gas)	No information available	
Flammability or explosive limits		

Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature Decomposition Temperature Viscosity Molecular Formula Molecular Weight No data available No data available No information available Not applicable No information available No data available No data available No information available Not applicable C13 H18 O2

206.28

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under recommended storage conditions.
Conditions to Avoid	Incompatible products.
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			
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propanoic acid, 2-(4-isobutylphenyl)-, S(+)-	636 mg/kg (Rat)	Not listed	Not listed
Toxicologically Synergistic	No information available		
Irritation	as well as chronic effects from sh No information available	ion and long-term exposu	
Sensitization	No information available		
Carcinogenicity	The table below indicates whe	ther each agency has listed	any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico			
Propanoic acid,	51146-56-6	Not listed	Not listed	Not listed	Not listed	Not listed			
2-(4-isobutylphenyl)-,									
S(+)-		<u> </u>							
Mutagenic Effects		No information ava	ailable						
Reproductive Effects		No information available.							
Developmental Effects		No information available.							
•									
Teratogenicity		No information ava	ailable.						
STOT - single exposure		None known							

STOT - repeated exposure	None known				
Aspiration hazard	No information available				
Symptoms / effects,both acute and delayed	No information available				
Endocrine Disruptor Information	No information available				
Other Adverse Effects	The toxicological properties have not been fully investigated.				
	12. Ecological information				
Ecotoxicity Do not empty into drains.					
Persistence and Degradability	Insoluble in water				
Bioaccumulation/ Accumulation	No information available.				

Mobility Is not likely mobile in the environment due its low water solubility.

Use Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Propanoic acid,	-	-	-	-	-		Х	Х	-	-	-
2-(4-isobutylphenyl)-, S(+)-											

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

TSCA 12(b)	Not applicable
SARA 313	Not applicable

SARA 311/312 Hazard Categories Acute Health Hazard Chronic Health Hazard Fire Hazard Sudden Release of Pressure Ha Reactive Hazard	azard	Yes Yes No No No
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 co	ntain 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	26-May-2017 26-May-2017 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

End of SDS