



1 Identification Product identifier Product name: 3-Phenylglutaric acid Stock number: A14571, L06200 **CAS Number:** 4165-96-2 EC number: 224-016-4 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. Inerrito Fisher Scheman C. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789. 2 Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) ! GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No information known. Label elements GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements Precadionary statements P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P405 Store locked um P405 Store locked um Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. P405 WHMIS classification D2B - Toxic material causing other toxic effects Ţ Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammàbility = 1 Physical Hazard = 1 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable 3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 4165-96-2 3-Phenylglutaric acid Identification number(s): EC number: 224-016-4 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly.

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(Contd. of page 1) Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special freatment needed No further relevant information available. 5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit. 6 Accidental release measures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information. 7 Handling and storage Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available. 8 Exposure controls/personal protection Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters Components with limit values that require monitoring at the workplace: Not required. Additional information: No data Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Penetration time of glove material (in minutes)** Not determined **Eye protection:** Safety glasses **Body protection:** Protective work clothing.

0 Physical and chamical properties

9 Physical and chemical properties		
Information on basic physical and ch General Information Appearance: Form: Color: Odor: Odor: Odor threshold:	nemical properties Lump Cream Not determined Not determined.	
pH-value:	Not applicable.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	140-143 °C (284-289 °F) Not determined Not determined	
Flash point: Flammability (solid, gaseous) Ignition temperature:	Not applicable Not determined. Not determined	

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Product name: 3-Phenylglutaric aci	id in the second s	
		(Contd. of page 2)
Decomposition temperature: Auto igniting:	Not determined Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits: Lower:	Not determined	
Upper:	Not determined	
Vapor pressure: Density:	Not applicable. Not determined	
Relative density	Not determined.	
Vapor density Evaporation rate	Not applicable. Not applicable.	
Solubility in / Miscibility with	Insoluble	
Water: Partition coefficient (n-octanol/water		
Viscosity: dynamic:	Not applicable.	
kinematic:	Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recom Thermal decomposition / conditions Possibility of hazardous reactions N Conditions to avoid No further relevan Incompatible materials: Oxidizing age Hazardous decomposition products:	to be avoided: Decomposition will not occur if used and stored according to specifications. o dangerous reactions known nt information available. nts	
11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant for Skin irritation or corrosion: Causes s Eye irritation: No sensitizing effects kn Germ cell mutagenicity: No effects kno Carcinogenicity: No classification date Reproductive toxicity: No effects kno Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects	classification: No data kin irritation. erious eye irritation. nown. a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. wn. - repeated exposure: No effects known. - single exposure: May cause respiratory irritation.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant in Persistence and degradability No further Bioaccumulative potential No further Mobility in soil No further relevant info Additional ecological information: General notes: Do not allow material to be released to Avoid transfer into the environment. Results of PBT and vPvB assessmen PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relev	ther relevant information available. relevant information available. rmation available. the environment without proper governmental permits. nt	
13 Disposal considerations		
Waste treatment methods	or national regulations to ensure proper disposal. nade according to official regulations.	
14 Transport information Not a hazardous material for transporta	tion.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA		
Class	None	
Packing group DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
· · · · ·	x II of MARPOL73/78 and the IBC Code Not applicable.	
Transport/Additional information:	Not dangerous according to the above specifications.	
		(Contd. on page 4) USA

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DOT Marine Pollutant (DOT):	No
GHS Tabel elements The product is classified Hazard pictograms	ons/legislation specific for the substance or mixture d and labeled in accordance with 29 CFR 1910 (OSHA HCS)
P405 Store locked up. P501 Dispose of contents/contai National regulations This product is not listed in the U.S. Environm to research and development only. This produc product must not be used for commercial purp SARA Section 313 (specific toxic chemical California Proposition 65 Prop 65 - Chemicals known to cause cance Prop 65 - Developmental toxicity Substance Prop 65 - Developmental toxicity, female SU Information about limitation of use: For use Other regulations, limitations and prohibitit Substance of Very High Concern (SVHC) a The conditions of restrictions according to market and use must be observed. Substance is not listed.	rer Substance is not listed. Substance is not listed. Substance is not listed. bstance is not listed. is not listed. is not listed. it regulations according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. o Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the guiring Authorisation for use) Substance is not listed.
information to ensure proper use and protect conformance with this Material Safety Data Si	is a supplement to other information gathered by them, and should make independent judgement of suitability of this the health and safety of employees. This information is furnished without warranty, and any use of the product not in Sheet, or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Date of preparation / last revision 11/23/20 Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemi CAS: Chemical Abstracts Service (division of the American O HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System LC50: Lethal concentration, 50 percent UVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hy OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	Department D15 / - nical Substances Chemical Society) m (Canada) lygienists (USA) A)