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MSDS

Material Safety Data Sheet

Mallinckrodt Baker, Inc.
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Pittsburgh, NJ 03865

MALLINCKRODT



24 Hour Emergency Telephone: 800-369-2151
CHEMTREC: 1-800-424-9300

National Response In Canada
CANUTEC: 015-893-4000

Outside U.S. and Canada
Chemtreat 202 488-7818

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service at (800-562-2537) for assistance

CONGO RED

SDS Number: C5148 --- *Effective Date: 12/08/96*

Product Identification

Synonyms: Congo Red Certified; Congo Red Indicator Grade; C.I. 22120; Direct Red 28; 1-Naphthalenesulfonic acid, 3,3'-(4,4'-biphenylenebis(azo))bis(4-amino-, disodium salt

CAS No.: 573-58-0

Molecular Weight: 696.67

Chemical Formula: C32H22N6Na2O6S2

Product Codes: 1983, 2329

Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
1-Naphthalenesulfonic Acid, 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[4-amino-, Disodium Salt	573-58-0	100%	Yes

Hazards Identification

Emergency Overview

WARNING! MAY BE HARMFUL IF SWALLOWED OR INHALED. CONTACT MAY RESULT IN ALLERGIC REACTION.

Potential Health Effects

Any exposure may cause an allergic reaction (possibly, anaphylactic shock). Other human health effects from exposure to Congo Red are not known. Based on data from experimental animal studies, the substance is presumed to be toxic.

Inhalation:

No information found, but compound should be handled as a potential health hazard.

Ingestion:

No information found, but compound should be handled as a potential health hazard.

Skin Contact:

No information found, but compound should be handled as a potential health hazard.

Eye Contact:

No information found, but compound should be handled as a potential health hazard.

Chronic Exposure:

No information found, but compound should be handled as a potential health hazard.

Aggravation of Pre-existing Conditions:

No information found.

. First Aid Measures

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Get medical attention immediately. Never give anything by mouth to an unconscious person.

Skin Contact:

Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

. Fire Fighting Measures

Fire:

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Contact with strong oxidizers may cause fire or explosion.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

. Accidental Release Measures

Warning! Use appropriate protection to avoid inhalation exposure and skin and eye contact. Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

. Physical and Chemical Properties

Appearance:

Brownish-red powder.

Odor:

Odorless.

Solubility:

Soluble in water.

Specific Gravity:

No information found.

pH:

8-9.5 (solution)

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

No information found.

Melting Point:

No information found.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

0. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce carbon monoxide, carbon dioxide, sulfur oxides, and nitrogen oxides.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Acids, oxidizing and reducing agents.

Conditions to Avoid:

Heat, flame, ignition sources, dusting and incompatibles.

1. Toxicological Information

Toxicological Data:

Oral rat LD50: 15200 mg/kg. Irritation Data (std Draize, rabbit): eye = 100mg, moderate. Investigated as a mutagen, reproductive effector.

Carcinogenicity:

Congo Red is a benzidine based dye. As such, it is expected to metabolize to benzidine, which is a known human carcinogen.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
1-Naphthalenesulfonic Acid, 3,3'-[[1,1'-biphenyl]-4,4'-diyl	No	No	None

bis(azo)]bis[4-amino-, Disodium
Salt (573-58-0)

2. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

3. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

4. Transport Information

Not regulated.

5. Regulatory Information

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-----\Chemical Inventory Status - Part 1\-----
Ingredient                                     TSCA   EC    Japan  Australia
-----
1-Naphthalenesulfonic
Acid,3,3'-[[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis
[4-amino-, Disodium Salt (573-58-0)          Yes   Yes   No     Yes
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-----\Chemical Inventory Status - Part 2\-----
Ingredient                                     Korea  --Canada--
                                     DSL    NDSL   Phil.
-----
1-Naphthalenesulfonic
Acid,3,3'-[[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis
[4-amino-, Disodium Salt (573-58-0)          Yes   Yes   No     Yes
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-----\Federal, State & International Regulations - Part 1\-----
Ingredient                                     -SARA 302-  -----SARA 313-----
                                     RQ    TPQ    List  Chemical Catg.
-----
1-Naphthalenesulfonic
Acid,3,3'-[[[1,1'-biphenyl]-4,4'-diylbis(azo)
[4-amino-, Disodium Salt (573-58-0)          No    No    No     No
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-----\Federal, State & International Regulations - Part 2\-----
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Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8 (d)
Phthalenesulfonic Acid, 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis[4-amino-, Disodium Salt (573-58-0)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): Yes CDTA: No
 RA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
 Reactivity: No (Pure / Solid)

Australian Hazchem Code: No information found.

Poison Schedule: No information found.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

6. Other Information

NFPA Ratings: Health: 1 Flammability: 1 Reactivity: 0

Label Hazard Warning:

WARNING! MAY BE HARMFUL IF SWALLOWED OR INHALED. CONTACT MAY RESULT IN ALLERGIC REACTION.

Label Precautions:

Avoid contact with eyes, skin and clothing.

Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

Label First Aid:

In all cases, get medical attention. In case of skin contact, immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. If swallowed, get medical attention immediately. Never give anything by mouth to an unconscious person.

Product Use:

Laboratory Reagent.

Revision Information:

New 16 section MSDS format, all sections have been revised.

Disclaimer:

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