

**GHS Safety Data Sheet** 

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#### Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### **PRODUCT NAME**

CHRYSOIDINE R (M.S.)

#### **OTHER NAMES**

C13-H14-N4.HCl, "1, 3-benzenediamine, 4-methyl-6-(phenylazo)-, monohydrochloride", "azo dyestuff based on o-toluidine and aniline"

#### **PRODUCT USE**

Dye-stuff.

#### SUPPLIER

Company: S D FINE- CHEM LIMITED

Address:

315-317, T.V. INDUSTRIAL ESTATE,

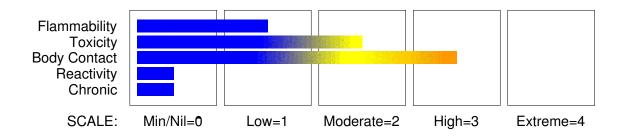
248, WORLI,

MUMBAI- 400030.INDIA. technical@sdfine.com

Telephone: 91- 22- 24959898 Telephone: 91- 22- 24959899

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#### **HAZARD RATINGS**



#### Section 2 - HAZARDS IDENTIFICATION

#### **GHS Classification**

Acute Toxicity (Oral) Category 4 Carcinogen Category 2 Serious Eye Damage Category 1

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#### **Section 2 - HAZARDS IDENTIFICATION**





#### **EMERGENCY OVERVIEW**

#### **HAZARD**

DANGER
Determined by using GHS criteria:
H302 H351 H318
Harmful if swallowed
Suspected of causing cancer
Causes serious eye damage

#### PRECAUTIONARY STATEMENTS

#### Prevention

Use personal protective equipment as required.

Do not handle until all safety precautions have been read and understood.

Obtain special instructions before use.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

#### Response

Wear eye/face protection.

If eye irritation persists, get medical advice/attention.

If exposed or concerned: Get medical attention advice.

Specific treatment: refer to Label or MSDS.

immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Storage

Store locked up.

#### **Disposal**

Dispose of contents and container in accordance with relevant legislation.

#### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME CAS RN %
C.I. Basic Orange 1 4438-16-8 >98

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#### **Section 4 - FIRST AID MEASURES**

#### **SWALLOWED**

- · Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

#### **EYE**

If this product comes in contact with the eyes:

- · Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- · If pain persists or recurs seek medical attention.
- · Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

If skin contact occurs:

- · Immediately remove all contaminated clothing, including footwear.
- · Flush skin and hair with running water (and soap if available).
- · Seek medical attention in event of irritation.

#### **INHALED**

- · If dust is inhaled, remove from contaminated area.
- · Encourage patient to blow nose to ensure clear passage of breathing.
- · If irritation or discomfort persists seek medical attention.

#### **NOTES TO PHYSICIAN**

Treat symptomatically.

#### **Section 5 - FIRE FIGHTING MEASURES**

#### **EXTINGUISHING MEDIA**

- · Foam.
- · Dry chemical powder.
- · BCF (where regulations permit).
- · Carbon dioxide.
- · Water spray or fog Large fires only.

#### **FIRE FIGHTING**

- · Use water delivered as a fine spray to control fire and cool adjacent area.
- · Do not approach containers suspected to be hot.
- · Cool fire exposed containers with water spray from a protected location.
- · If safe to do so, remove containers from path of fire.
- · Equipment should be thoroughly decontaminated after use.

#### FIRE/EXPLOSION HAZARD

- · Solid which exhibits difficult combustion or is difficult to ignite.
- · Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame

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#### **Section 5 - FIRE FIGHTING MEASURES**

or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.

- Dry dust can also be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport.
- · Build-up of electrostatic charge may be prevented by bonding and grounding.
- Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
- · All movable parts coming in contact with this material should have a speed of less than 1-metre/sec.

Combustion products include: carbon monoxide (CO), nitrogen oxides (NOx) and hydrogen chloride.

#### FIRE INCOMPATIBILITY

Avoid contamination with strong oxidising agents as ignition may result.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

#### **EMERGENCY PROCEDURES**

#### MINOR SPILLS

- · Clean up all spills immediately.
- · Avoid contact with skin and eyes.
- · Wear impervious gloves and safety glasses.
- · Use dry clean up procedures and avoid generating dust.
- · Sweep up or
- · Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
- · Place spilled material in clean, dry, sealable, labelled container.

#### **MAJOR SPILLS**

- · Clear area of personnel and move upwind.
- · Alert Fire Brigade and tell them location and nature of hazard.
- · Control personal contact by using protective equipment and dust respirator.
- · Prevent spillage from entering drains, sewers or water courses.
- · Avoid generating dust.
- · Sweep, shovel up. Recover product wherever possible.
- · Put residues in labelled plastic bags or other containers for disposal.
- · If contamination of drains or waterways occurs, advise emergency services.

#### SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+: May be stored together

O: May be stored together with specific preventions

X: Must not be stored together

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

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#### **Section 7 - HANDLING AND STORAGE**

#### PROCEDURE FOR HANDLING

- · Limit all unnecessary personal contact.
- · Wear protective clothing when risk of exposure occurs.
- · Use in a well-ventilated area.
- · When handling DO NOT eat, drink or smoke.
- · Always wash hands with soap and water after handling.
- · Avoid physical damage to containers.
- · Use good occupational work practice.
- · Observe manufacturer's storing and handling recommendations.

#### **SUITABLE CONTAINER**

- · Polyethylene or polypropylene container.
- · Packing as recommended by manufacturer.
- · Check all containers are clearly labelled and free from leaks.

#### STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.

#### STORAGE REQUIREMENTS

- · Keep dry.
- · Store in original containers.
- · Keep containers securely sealed.
- · No smoking, naked lights or ignition sources.
- · Store in a cool, dry, well-ventilated area.
- · Store away from incompatible materials.
- · Protect containers against physical damage.
- · Check regularly for leaks.
- · Observe manufacturer's storing and handling recommendations.

#### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE CONTROLS**

The following materials had no OELs on our records

C.I. Basic Orange 1:

CAS:4438- 16- 8

#### MATERIAL DATA

These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:

- · the architecture of the air spaces remain intact,
- · scar tissue (collagen) is not synthesised to any degree,
- · tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

- · seriously reduce visibility.
- · cause unpleasant deposits in the eyes, ears and nasal passages,
- · contribute to skin or mucous membrane injury by chemical or mechanical action, per se,

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#### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH] This limit does not apply:

- · to brief exposures to higher concentrations
- · nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- $\cdot$  are insoluble or poorly soluble\* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e., are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload).

#### PERSONAL PROTECTION









#### EYE

- · Safety glasses.
- · Safety glasses with side shields.
- · Chemical goggles.
- · Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

#### HANDS/FEET

Wear general protective gloves, eg. light weight rubber gloves.

#### **OTHER**

Overalls.

- · Impervious protective clothing.
- · Eyewash unit.

#### RESPIRATOR

Protection Factor	Half- Face Respirator	Full- Face Respirator	Powered Air Respirator
10 x ES	P1 Air- line*	·	PAPR- P1 -
50 x ES	Air- line**	P2	PAPR- P2
100 x ES	-	P3	-
		Air- line*	-
100+ x ES	<del>-</del>	Air- line**	PAPR- P3

<sup>\* -</sup> Negative pressure demand \*\* - Continuous flow.

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#### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult your

Occupational Health and Safety Advisor.

#### **ENGINEERING CONTROLS**

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air) aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation) direct spray, spray painting in shallow booths. drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).

Air Speed: 0.25- 0.5 m/s (50- 100 f/min)

0.5- 1 m/s (100- 200 f/min.)

1- 2.5 m/s (200- 500 f/min)

2.5- 10 m/s (500- 2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range

1: Room air currents minimal or favourable to capture

2: Contaminants of low toxicity or of nuisance value only

3: Intermittent, low production.

4: Large hood or large air mass in motion

Upper end of the range

1: Disturbing room air currents

2: Contaminants of high toxicity

3: High production, heavy use

4: Small hood - local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

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#### **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

#### **APPEARANCE**

Orange solid; does not mix well with water (15 g/l, 25 C).

#### PHYSICAL PROPERTIES

Solid.

Does not mix with water.

Molecular Weight: 262.74 Melting Range (°C): 125

Solubility in water (g/L): Partly miscible pH (1% solution): 2.8 (20 g/l H2O) Volatile Component (%vol): Negligible Relative Vapour Density (air=1): >1 Lower Explosive Limit (%): Not available Autoignition Temp (°C): Not available

State: Divided solid

Boiling Range (°C): Not available

Specific Gravity (water=1): 400- 660 kg/m3

pH (as supplied): Not applicable Vapour Pressure (kPa): Negligible Evaporation Rate: Not available Flash Point (℃): Not available

Upper Explosive Limit (%): Not available. Decomposition Temp (°C): Not available.

#### Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

#### CONDITIONS CONTRIBUTING TO INSTABILITY

- · Presence of incompatible materials.
- · Product is considered stable.
- · Hazardous polymerisation will not occur.

#### Section 11 - TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH EFFECTS

#### **ACUTE HEALTH EFFECTS**

#### **SWALLOWED**

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Considered an unlikely route of entry in commercial/industrial environments.

#### **EYE**

When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.

Risk of serious damage to eyes.

#### SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

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#### Section 11 - TOXICOLOGICAL INFORMATION

#### **INHALED**

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

#### CHRONIC HEALTH EFFECTS

On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.

Principal routes of exposure are usually by skin contact/absorption and inhalation of generated dust.

Limited evidence of a carcinogenic effect.

#### **TOXICITY AND IRRITATION**

TOXICITY

Oral (rat) LD50: 990 mg/kg \*

**IRRITATION** 

Eye (rabbit): Irritant \*

Skin (rabbit): non- Irritant \*

\* Bayer

#### **Section 12 - ECOLOGICAL INFORMATION**

Ecotoxicology:

Fish LC0 (72 h): Leuciscus idus 1-10 mg/l Inhibition of activity of waste-water bacteria:

Pseudomonas fluorescens: No inhibitory effects at 1000 mg/l Growth inhibition test modified according to G. Bringmann

Gesundheitsingenieur 94, 366-369 (1973) Hazard class (WGK): 2 - impairs water quality

WGK: Classification in accordance with German Water Resources Act.

### **Section 13 - DISPOSAL CONSIDERATIONS**

- · Consult manufacturer for recycling options and recycle where possible .
- · Consult State Land Waste Management Authority for disposal.
- · Incinerate residue at an approved site.
- · Recycle containers if possible, or dispose of in an authorised landfill.

#### **Section 14 - TRANSPORTATION INFORMATION**

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA, IMDG  $\,$ 

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#### **Section 15 - REGULATORY INFORMATION**

#### **REGULATIONS**

No regulations applicable

No data available for C.I. Basic Orange 1 as CAS: 4438-16-8.

#### **Section 16 - OTHER INFORMATION**

#### Denmark Advisory list for selfclassification of dangerous substances

Substance CAS Suggested codes
C.I. Basic Orange 1 4438- 16- Xn; R22 Mut3;
8 R40 Carc3; R40
R43

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

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