



1. Identification of substance:

Trade name: Diffusions Red 200 (Height temperature)

Article number: CDR

Manufacturer/Supplier

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Advice:

Helmut Klumpf, Techn. Chemie KG, H. Klumpf

Emergency advice:

As stated above or next emergency phone

2. Hazards identification

Hazards designation:

F+ Extremely flammable

Information pertaining to particular dangers for man and environment:

R 12 Extremely flammable

No other information's, see point 11

3. Composition/information on ingredients

Chemical characterization (preparation):

Penetrant with agent of:

Paraffins, isoparaffins, naphthenes, aromatic, hydrocarbons with wetting agents and red azo dyes.

| CAS-No. | Name of chemical | EINECS-number | EWG-no. | weight % | Symbols | R-phrases |
|------------|-------------------------------|---------------|--------------|----------|---------|-----------|
| 106-97-8 | N-Butane | 203-448-7 | 601-004-00-0 | 5 - 20 | F+ | 12 |
| 74-98-6 | Propane | 200-827-9 | 601-003-00-5 | 5 - 20 | F+ | 12 |
| 56358-09-9 | azo dyes C.I.: Solvent Red 19 | | | < 1 | Xn | 40 |

4. First aid measures

General information:

Change soaked clothes and clean them before putting on.

After inhalation:

Ensure supply of fresh air.

In the event of symptoms refer for medical treatment.

After skin contact:

In case of contact with skin wash off with soap and water.

After eye contact:

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

After swallowing

Do not induce vomiting; instantly call for medical help. Instantly call for doctor

5. Fire fighting measures

Suitable extinguishing material:

ABC powder, foam, carbon dioxide.

Extinguishing material that must not be used for safety reasons:

Full water jet.



Special exposure hazards extinguishing from the substance or preparation itself, combustible products or resulting gases:

None

Special protective equipment for fire fighters:

None

Additional information's:

Cool containers at risk with water spray jet.
Danger for bursting of aerosols when heated for more than 50°C.
Aerosols that burst in fire can be mightily shot away.

6. Accidental release measures

Personal precautions:

Ensure adequate ventilation. Keep away sources of ignition.

Environmental precautions:

Do not discharge into the subsoil/soil.
Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up:

Take up with absorbent material(e.g. sand, sawdust, kieselguhr, general-purpose binder).

7. Handling and storage

Handling:

Advice on safe handling:

Provide good room ventilation even at ground level (vapours are heavier than air).
Avoid formation of aerosols.

Advice on protection against fire and explosion:

Keep away from sources of ignition. Do not smoke.

Storage:

Requirements for storage rooms and vessels:

Filled aerosols must not be exposed to:

1. Heating of more than 50°C by sun beams or other heat sources.
2. Storage in gates, passages, wells of staircases, buildings, floors, and lofts.

Keep container in a well-ventilated place.

Advice on storage compatibility:

Do not store together with oxidizing agents.

Further information on storage conditions:

Keep container in a well-ventilated place.

Classification acc. to prescription:

Aerosols (Aerosol containers) (TRG 300)

8. Exposure controls/personal protection

Additional advice on system design:

No other information's, see point 7.

Ingredients with occupational exposure limits to be monitored:

| CAS - NR. | Name of chemical | % | Code | Value | Unit |
|-----------|------------------|--------|------|-------------|--|
| 106-97-8 | butane | 5 - 20 | MAK | 1000 (2350) | ml/m ³ (mg/m ³) |
| 74-98-6 | propane | 5 - 20 | MAK | 1000 (1800) | ml/m ³ (mg/m ³) |

Additional information's:

None



Personal protection equipment:

Respiratory protection:

Respiratory protection in the event of aerosol or mist formation.

Hand protection:

Gloves (oil-resistant)

Skin Protection:

Light protective clothing.

Eye protection:

Tightly fitting goggles

General protective measures:

Avoid contact with eyes.

Avoid prolonged and/or repeated contact with skin.

Hygiene measures:

At work do not eat, drink, smoke, or take drugs.

Remove soiled or soaked clothing immediately.

Cloths contaminated with product should not be kept in trouser pockets.

9. Physical and chemical properties

General Information

Form: Aerosol Colour: dark red Smell: characteristic

Appearance:

Form: Aerosol Colour: Odour:

Data relevant for safety:

(Product without power gas)

Boiling range: ca. 390 °C (DIN 53 171)

Flash point: > 300 °C (DIN 51 758)

Ignition temperature: > 450 °C (DIN 51 794)

Explosive properties: The Product is not explosive, but
may form flammable/explosive vapour-air mixture.

Explosion limits Lower e.l.: Vol. %

Upper e.l.: Vol. %

Vapour pressure (20°C): No data are available. mbar

Density (20°C): 0,92 g/cm³ (DIN 51 757)

Solubility in water (20°C): not soluble

Viscosity (20°C): 41 mm²/s

10. Stability and reactivity

Conditions to avoid:

No decomposition if used correctly. No reactions by normal use

Materials to avoid:

No hazardous reactions known.

Hazardous decomposition products:

Ammonia

11. Toxicological information

Toxicity test:

Acute Toxicity:



Irritability/Corrosiveness:

Skin: Slight irritation

Eye: Slight irritation

Sensitization:

No sensitization known.

Additional information:

The possibility of a reductive fission causes the suspicion that AZO dye-stuffs release cancerogene aromatic amines. It is dangerous if the AZO dye-stuffs are absorbed from the body. Resorption of those dye-stuffs can be effected by inhalation, swallowing of dusts or aerosols as well as by skin contact

12. Ecological information

Data on elimination (persistence and degradability):

Can be eliminated from the water by precipitation or flocculation.

Danger class for water (WKG 2 German only) = dangerous for water

Behaviour in environment compartments:

Not known.

Ecotoxicological effects:

No data are available.

General information's:

Do not discharge product unmonitored into the environment.

13. Disposal considerations

Product:

Recommendations:

Hand over to authorized disposal agency.

Waste code No.:

EAK: 14 06 03 term: Mixture of solvent

Contaminated packaging:

Recommendations:

Container must be completely emptied and must not be opened by force.

Hand over to authorized disposal agency.

Waste code No.:

EAK: 15 01 10 term: Iron-metal containers with a contaminated rest of the contents

14. Transport information

Land transport ADR

UN-Nr.: 1950 Identification: DRUCKGASPACKUNGEN

Class: 2 Package Group: --

Classifications code: 5 F shipment category: 2

Labelling of the Package: UN 1950 AEROSOLE Label-no.: 2.1

Packing instruction: P 204, MP 9 Max.. gross/Package: 50 kg

Limited of volume: LQ 2 Exemption after chapter 3.4.3: Package ≤ 30 kg

Labelling of the Package: diamond (100 x 100 mm) with UN 1950.

Marine transport IMDG/GGVSee

UN-No.: 1950 Class: 2 Package Group: --

EMS-No.: F-D, S-U Label-no.: -- Marine Pollutant: -- Label: --

Proper Shipping Name: Aerosols (Limited Quantities Only) (Package ≤ 30 kg)



Air transport ICAO-TI and IATA-DGR

Class/Division: 2.1 UN/ID-Nr.: 1950
Package Group: --, Label: Flammable gas
Packing inst. Passenger aircraft: 203/Y203 Max. netto/Package: 75 kg/30 kg
Packing inst. Cargo aircraft: 203 Max. netto/Package: 150 kg
Proper Shipping Name: Aerosols, flammable

15. Regulatory information

Designation according to EC guidelines:

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV).

Code letter and hazard designation for product:

F+ Extremely flammable

Risk - phrases:

12 Extremely flammable

Safety - phrases:

- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe vapour/spray.
- 33 Take precautionary measures against static discharges.
- 51 Use only in well-ventilated areas.

Special labelling:

Container is under pressure. Protect from sun and temperatures above 50°C. Do not open with force or incinerate even after use. Do not spray into flames or onto glowing objects. Keep away from sources of ignition - No smoking. Keep out of reach of children. Use only in well ventilated areas.

National Regulations (German): TRGS 614

TA-Air/classification, compound, remarks: Class 3 (organic)

Water hazard class: WGK 2 (dangerous for water)

16. Other information

Restriction of occupation:

Observe employment restrictions for young people.

Recommended uses:

As **PENETRANT** at the penetration process by colours acc. to EN ISO 3452-1 [EN 571-1] (DIN 54 152 part 1) for finding surface cracks.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
