

1. Identification of the substance/mixture and of the company/undertaking:

Product identifier

Trade name: Diffusions Red 200

Article number: CDR

Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the preparation

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.

Details of the supplier of the safety data sheet

Manufacturer/Supplier

Helmut Klumpf

Technische Chemie KG

Industriestr. 15

D - 45699 Herten Phone.: +49(0)2366 1003 - 0 Fax: +49(0)2366 1003 - 11 Email: klumpf@diffu-therm.de

Emergency telephone number: a.m. or next Emergency phone:

2. Hazards identification

Classification of the substance or mixture

Flammable Aerosol, Category 1

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.



Hazard pictograms GHS02

Signal word Danger

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P271 Use only outdoors or in a well-ventilated area.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Results of PBT and PvB assessment

PBT: Not applicable

vPvB: Not applicable

3. Composition/information on ingredients

Chemical characterization:

Aerosol with mixture of substances listed below and non-hazardous additions.

Components:	Name of chemical	weight %
CAS: 106-97-8 EINECS: 203-448-7	n-butane GHS02 Flam. Gas 1, H220; GHS04	5-20
CAS: 106-97-8 EINECS: 203-448-7	n-butane GHS02 Flam. Gas 1, H220; GHS04	5-20
CAS: EINECS:	azo dyes C.I. Solvent Red 19 GHS07, H315, H317, H336; GHS08, H351, H373; GHS09, H411	< 1

4. First aid measures

Description of first aid measures

General information

Instantly remove any clothing soiled by the product.

If you feel uncomfortable consult a doctor and show the label if possible.

Personal protection for the First Aider.

After inhalation

Take affected persons into the open air and position comfortably

Remove the person from the danger zone under proper respiratory protection. If breathing is irregular or stopped, give artificial respiration. Comfortable for the patients and provide medical help.

Seek medical treatment in case of complaints.

After skin contact

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

After eye contact

Rinse opened eye for at least 15 minutes under running water. Get medical attention if irritation occurs.

After swallowing

In case of persistent symptoms consult doctor.

Do not induce vomiting - aspiration!

Do not vomit. Swallow activated carbon and sodium sulphate.

Information for doctor

Most important symptoms and effects, both acute and delayed

Headache, Dizziness, Sickness, tiredness and other effects on the CNS.

Signs and symptoms of eye irritation may include: Burning sensation, redness, swelling and / or blurred vision. Dry skin.

Indication of any immediate medical attention and special treatment needed

Causes depression of the central nervous system. Potential of a chemical pneumonia. Information from a doctor or poison control center to obtain.

If ingested, material may be aspirated into the lungs and cause chemical pneumonia. Treat appropriately.

5. Fire fighting measures

Description of first aid measures

Suitable extinguishing agents

water haze, water spray-jet, alcohol resistant foam.

use dry extinguishers like power, sand just for small fires.

For safety reasons unsuitable extinguishing agents Water with a full water jet.

Special hazards arising from the substance or mixture Carbon monoxide (CO)

Advice for fighters

Protective equipment: Wear self-contained breathing apparatus.

Additional information:

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, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Bring persons out of danger.

Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Prevent material from reaching sewage system, holes and cellars.

Inform respective authorities in case product reaches water or sewage system.

Dilute with much water. Prevent from spreading (e.g. by damming-in or oil barriers).

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Reference to other sections

See Section 8 for information on personal protection equipment.

7. Handling and storage

Handling:

Advice on safe handling:

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

Advice on protection against fire and explosion:

Keep away from sources of ignition.

Do not smoke.

Take precautionary measures against static discharges.



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)

Ordinance on Industrial Safety and Health

TRGS 510.

Storage class: 2B

8. Exposure controls/personal protection

Additional information about design for technical systems:

No other information's, see point 7.

Control parameters

Components with critical values that require monitoring at the workplace:	
106-97-8 N-Butan	(5 – 20%)
MAK /AGW	2.400 mg/m ³ , 1.000 ml/m ³ ; 4(II); DFG
74-98-6 Propan	(5 – 20%)
MAK /AGW	1.800 mg/m ³ , 1.000 ml/m ³ ; 4(II); DFG

Exposure controls

Personal protection equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Use breathing protection in case of insufficient ventilation.

If user operations generate dust, fume or mist, use local exhaust ventilation to keep exposure to dust below the exposure limits.

Protection of hands: Protective gloves.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

A chemical goggles is recommended.

Tightly sealed safety glasses.

Gauze goggles

Body protection: Protective work clothing.

9. Physical and chemical properties

General Information

Appearance:

Form: Aerosol

Colour: dark red

Smell: characteristic

Data relevant for safety:

(Product without power gas)

Boiling range:

ca. 390 °C

Flash point:

> 300 °C

Ignition temperature:

> 450 °C

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/cm ³
Solubility in water (20°C):	not soluble	
Viscosity (20°C):	41	mm ² /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.

Water hazard class 1 (assessment by list): slightly hazardous 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.:

EAV: 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.:

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

Waste treatment methods

Recommendations

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according the local authority regulations.



14. Transport information

Land transport

UN-Nr.: 1950 Identification: DRUCKGASPACKUNGEN flammable
Class: 2 Package Group: -- Tunnel restriction code: D
Classifications code: 5 F shipment category: 2
Labelling of the Package: UN 1950 AEROSOLE Label-no.: 2.1
Packing instruction: P 003, MP 9 Limited Quantities Only: 1L (Package ≤ 30 kg)

Marine transport IMDG/GGVSee

UN-No.: 1950 Class: 2.1 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: 2.1
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

Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

National regulations

Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally contractual relationship. (TRGS 555)

Hazard statements

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Harmful to aquatic life with long lasting effects.

Department issuing data specification sheet:

Contact: Helmut. Klumpf Technische Chemie KG

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent