

Printing date 09/18/2015

Version number 35

Reviewed on 09/18/2015

1 Identification

- · Product identifier
 - · Product number CQT19
 - · Trade name: DRY GLAZE BLACK
 - · Relevant identified uses of the substance or mixture and uses advised against

Paint and relative material only for wood

· Application of the substance / the mixture For professional use

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

IVM Chemicals srl

Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441

· Information department:

Environmental Health and safety office

hseoffice@ivmchemicals.com

· Emergency telephone number:

ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

- · Label elements
 - · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS02

- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapor.

· Precautionary statements

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

P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves / eye protection / face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· Additional information:

2 percent of the mixture consists of ingredient(s) of unknown toxicity.

Classification system:

· NFPA ratings (scale 0 - 4)



Health = 0 Fire = 3 Reactivity = 0

(Contd. on page 2)



Printing date 09/18/2015

Version number 35

Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 1)

· HMIS-ratings (scale 0 - 4)



3 Composition/information on ingredients

- · Chemical characterization: Mixtures
 - · Description: Mixture: consisting of the following components.

| · Dangerous components: | | | |
|-------------------------|------------|---|-----------|
| 64-17-5 | ethanol | ♦ Flam. Liq. 2, H225 | 75-100% |
| 107-21-1 | ethanediol | ♠ Acute Tox. 4, H302 | 5-9.99% |
| 67-64-1 | acetone | Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336 | 2.5-4.99% |
| 78-93-3 | butanone | Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336 | 1-2.49% |

4 First-aid measures

- · Description of first aid measures
 - · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed
 For symptoms and effects caused by substances, refer to Section 11.
 - · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents: Alcohol resistant foam, CO, powder, water spray/mist.
 - · For safety reasons unsuitable extinguishing agents:

 Do not use a jet water stream as it may scatter and spread fire.
- Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

· Advice for firefighters

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.

· Protective equipment:

Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.



Printing date 09/18/2015

Version number 35

Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 2)

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

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to Section 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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

Ensure good ventilation/exhaustion at the workplace.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- Conditions for safe storage, including any incompatibilities
 - · Storage:
 - · Requirements to be met by storerooms and receptacles:

Store in a cool, well-ventilated area, away from heat and sources of ignition

Provide solvent resistant, sealed floor.

Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.

In cases where there is no reported expiration date, it means that the product must be used within 8 months.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 4)



Printing date 09/18/2015 Version number 35 Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 3)

· Control parameters

| 64-1 | 7-5 ethanol |
|------|---------------------------------------|
| PEL | Long-term value: 1900 mg/m³, 1000 ppm |

· Components with limit values that require monitoring at the workplace:

REL Long-term value: 1900 mg/m³, 1000 ppm TLV Short-term value: 1880 mg/m³, 1000 ppm

107-21-1 ethanediol

TLV Short-term value: NIC-127* mg/m³

Long-term value: NIC-10** NIC-63.5* mg/m³, NIC-25* ppm

Ceiling limit value: (100) mg/m3

(H); *inh. fraction + vapor,P:**inh. fraction, H

67-64-1 acetone

PEL Long-term value: 2400 mg/m³, 1000 ppm
REL Long-term value: 590 mg/m³, 250 ppm
TLV Short-term value: 1187 mg/m³, 500 ppm
Long-term value: 594 mg/m³, 250 ppm
BEI

78-93-3 butanone

PEL Long-term value: 590 mg/m³, 200 ppm
REL Short-term value: 885 mg/m³, 300 ppm
Long-term value: 590 mg/m³, 200 ppm
TLV Short-term value: 885 mg/m³, 300 ppm
Long-term value: 590 mg/m³, 200 ppm
BEI

· Ingredients with biological limit values:

67-64-1 acetone

BEI 50 mg/L

Medium: urine Time: end of shift

Parameter: Acetone (nonspecific)

78-93-3 butanone

BEI 2 mg/L

Medium: urine Time: end of shift Parameter: MEK

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

· Personal protective equipment:

- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:

Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The glove material has to be impermeable and resistant to the product.

· 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. As the product is a preparation of several substances, the resistance of the glove material can not be

(Contd. on page 5)



Printing date 09/18/2015 Version number 35 Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 4)

calculated in advance and has therefore to be checked prior to the application.

· 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:

· *Kinematic at 20 °C (68 °F):*

· Oxidising properties:



Tightly sealed goggles

| Physical and chemical property | |
|---|--|
| Information on basic physical and General Information | cnemical properties |
| · Appearance: | |
| · Form: | Fluid |
| · Color: | According to product specification |
| · Odor: | Characteristic |
| · Odour threshold: | Not determined. |
| · pH-value: | Not determined. |
| · Change in condition | |
| · Melting point/Melting range: | Undetermined. |
| · Boiling point/Boiling range: | 55 °C (131 °F) |
| · Flash point: | -17 °C (1 °F) |
| · Flammability (solid, gaseous): | Not applicable. |
| · Ignition temperature: | 410 °C (770 °F) |
| \cdot Decomposition temperature: | Not determined. |
| · Auto igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product is not explosive. However, formation of explosivair/vapor mixtures are possible. |
| · Explosion limits: | |
| · Lower: | 1.8 Vol % |
| · Upper: | 53.0 Vol % |
| · Vapor pressure at 20 °C (68 °F): | 233 hPa (175 mm Hg) |
| · Density at 20 °C (68 °F): | 0.85 g/cm³ (7.093 lbs/gal) |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with | |
| · Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/wate | er): Not determined. |
| · Viscosity: | |
| · Dynamic: | Not determined. |

29 s (ISO 3 mm)

N.A.



Printing date 09/18/2015 Version number 35 Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

 Solvent content:
 85.0 %

 VOC content:
 85.0 %

 722.5 g/l / 6.03 lb/gl

 Solids content:
 12.0 %

 Other information (HAPS)

 107-21-1 ethanediol
 5-9,99%

 Other information
 No further relevant information available.

10 Stability and reactivity

- · Reactivity typical of the product as indicated in the data sheet
 - · Chemical stability The product is stable in normal conditions of storage and use recommended
 - Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · Possibility of hazardous reactions Vapours may form explosive mixtures with air
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

in case of possible formation of combustion:

Carbon monoxide and carbon dioxide

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

| Oral LD50 10470 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 20000 mg/kg (Con) Inhalative LC50/4 h 124.7 mg/l (rat/szczur/mouse/souris/Maus/ratón) 107-21-1 ethanediol Oral LD50 301 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 3501 mg/kg (mouse) 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 20000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) | · LD/LC50 values that are relevant for classification: | | |
|--|--|-----------|--|
| Dermal LD50 20000 mg/kg (Con) Inhalative LC50/4 h 124.7 mg/l (rat/szczur/mouse/souris/Maus/ratón) 107-21-1 ethanediol Oral LD50 301 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 3501 mg/kg (mouse) 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | 64-17-5 ethanol | | |
| Inhalative LC50/4 h 124.7 mg/l (rat/szczur/mouse/souris/Maus/ratón) 107-21-1 ethanediol Oral LD50 301 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 3501 mg/kg (mouse) 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Oral | LD50 | 10470 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| 107-21-1 ethanediol Oral LD50 301 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 3501 mg/kg (mouse) 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Dermal | LD50 | 20000 mg/kg (Con) |
| Oral LD50 301 mg/kg (rat/szczur/mouse/souris/Maus/ratón) Dermal LD50 3501 mg/kg (mouse) 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Inhalative | LC50/4 h | 124.7 mg/l (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal LD50 3501 mg/kg (mouse) 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | 107-21-1 e | ethanedio | |
| 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Oral | LD50 | 301 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Inhalative LC50/6 h 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) 67-64-1 acetone Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Dermal | LD50 | 3501 mg/kg (mouse) |
| 67-64-1 acetoneOralLD505800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | | | 9530 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| Oral LD50 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Inhalative | LC50/6 h | 2.5 ppm (rat/szczur/mouse/souris/Maus/ratón) |
| , | 67-64-1 ac | etone | |
| Dermal LD50 20000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) | Oral | LD50 | 5800 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| | Dermal | LD50 | 20000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| Inhalative LC50/4 h 76 mg/l (rat/szczur/mouse/souris/Maus/ratón) | Inhalative | LC50/4 h | 76 mg/l (rat/szczur/mouse/souris/Maus/ratón) |
| 78-93-3 butanone | | | |
| Oral LD50 2001 mg/kg (rat/szczur/mouse/souris/Maus/ratón) | Oral | LD50 | 2001 mg/kg (rat/szczur/mouse/souris/Maus/ratón) |
| Dermal LD50 5001 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) | Dermal | LD50 | 5001 mg/kg (rabbit/królik/Kaninchen/conejo/lapin) |
| Inhalative LC50 21 mg/l (rat/szczur/mouse/souris/Maus/ratón) | Inhalative | LC50 | 21 mg/l (rat/szczur/mouse/souris/Maus/ratón) |

· Primary irritant effect:

• on the skin: No irritant effect. • on the eye: No irritating effect.

(Contd. on page 7)



Printing date 09/18/2015

Version number 35

Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 6)

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Causes serious eye irritation.

2 percent of the mixture consists of ingredient(s) of unknown toxicity.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

| · Aquatic toxicity: | | |
|---------------------|----------------------------|--|
| 64-17-5 ethanol | | |
| EC50 | 5012 mg/l (daphnia) (48 h) | |
| LC50 (96h) | 15.3 mg/l (Fish) | |
| 67-64-1 acetone | | |
| EC50 | 8800 mg/l (daphnia) | |
| LC50 (96h) | 5540 mg/l (Fish) | |
| 78-93-3 butanone | | |
| EC50 | 2029 mg/l (algae) (96 h) | |
| | 308 mg/l (daphnia) (48 h) | |
| LC50 (96h) | 2993 mg/l (Fish) | |

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- · Additional ecological information:
 - · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

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

Hand over to hazardous waste disposers.

Dispose of contents and container in accordance with local state and federal regulations.

(Contd. on page 8)



Printing date 09/18/2015 Version number 35 Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 7)

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

| UN-Number | |
|---|---|
| $\cdot DOT$ | NA 1263 |
| · IMDG, IATA | UN1263 |
| UN proper shipping name | |
| $\cdot DOT$ | Paint |
| · IMDG, IATA | PAINT |
| Transport hazard class(es) | |
| \cdot DOT | |
| | |
| FLAMMABLE LIQUID | |
| 3 | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · IMDG, IATA | |
| | |
| | |
| 3 | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| Packing group | |
| · DOT, IMDĠ, IATA | II |
| Environmental hazards: | |
| · Marine pollutant: | No |
| Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 33 |
| · EMS Number: | F-E, <u>S-E</u> |
| Transport in bulk according to Annex | |
| MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| · IMDG | 5L |
| · Limited quantities (LQ) · Excepted quantities (EQ) | 5L Code: E2 |
| · Excepted quantities (EQ) | Maximum net quantity per inner packaging: |
| | ml |
| | Maximum net quantity per outer packagin |
| | 500 ml |



Printing date 09/18/2015 Ve

Version number 35

Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 8)

· UN "Model Regulation":

UN1263, Paint, special provision 640D, 3, II

15 Regulatory information

 Safety, health and environmental regulations/legislation specific for the substance or mixture

Requirements of Federal Register

· SARA

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

| 107-21-1 | ethanediol | 5-9,99% |
|-----------------|------------|---------|
| <i>7</i> 8-93-3 | butanone | 1-2,49% |

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

64-17-5 ethanol 75-100%

· Carcinogenic categories

| · EPA (Environmental Protection Agency) | | | | |
|---|---------|----------|---|-----------|
| | 67-64-1 | acetone | I | 2,5-4,99% |
| | 78-93-3 | butanone | I | 1-2,49% |

· TLV (Threshold Limit Value established by ACGIH)

| · 1Lv (Threshold Limit value established by ACGII) | | |
|--|------------|----|
| 64-17-5 | ethanol | A3 |
| 107-21-1 | ethanediol | A4 |
| 67-64-1 | acetone | A4 |

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: IVM Chemicals Srl

(Contd. on page 10)



Printing date 09/18/2015

Version number 35

Reviewed on 09/18/2015

Product number CQT19

Trade name: DRY GLAZE BLACK

(Contd. of page 9)

· Contact: See emergency phone

· Date of preparation / last revision 09/18/2015 / 34

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, ÉU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

·Sources

Directive 1999/45/EC and following amendments

Directive 67/548/EEC and following amendments and adjustments

Agency ECHA web site

INRS Fiche Toxicologique

IARC International agency for research on cancer

* * Data compared to the previous version altered.

US