

Printing date 11/10/2015

Reviewed on 11/10/2015

1 Identification**Product identifier**

Trade name: CF101 Cleaner Item
number: 7100041, 7100048
MWPCSC 7520

Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

Application of the substance / the mixture Used in casting house as solvent to clean machinery.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
The ExOne Company
2341 Alger Dr., Troy, MI 48083
Phone 248-740-1580
Fax 248-457-0630
email:midwest@exone.com

Information department:

Production department
midwest@exone.com

Emergency telephone number:

Emergency CONTACT (24-Hour-Number): GBK/Infotrac ID 93315: (USA domestic) 1 800 535 5053 or international (001) 352 323 3500

2 Hazard(s) identification**Classification of the substance or mixture**

The product is not classified according to the Globally Harmonized System (GHS).

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

Information concerning particular hazards for human and environment:

The product does not have to be labeled due to the calculation procedure of international guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH 1 Health = 1
FIRE 1 Fire = 1
REACTIVITY 0 Reactivity = 0

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

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vPvB: Not applicable.

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3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture: consisting of the following components.

Non-hazardous components: 7732-18-5 demineralized water

Dangerous components:

57-55-6	propane-1,2-diol	⚠ Acute Tox. 4, H302	30-70%
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4 First-aid measures

General information: No special measures required.

After inhalation: After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

After skin contact: Immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash clothing before reuse.

After eye contact: Rinse opened eye for 15 minutes under running water & get medical attention.

After swallowing: Rinse mouth. GET MEDICAL ATTENTION IMMEDIATELY. Do NOT give liquids to an unconscious or convulsing person. **Most important symptoms and effects, both acute and delayed** No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Suitable extinguishing agents: Use dry powder, alcohol-resistant foam, water spray, carbon dioxide.

Special firefighting procedures: Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots.) Use NIOSH approved positive-pressure self contained breathing apparatus. **Unusual explosion and fire procedures:**

SLIGHTLY COMBUSTIBLE! Keep container tightly closed. Isolate from oxidizers, heat, & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Continue all label precautions. **Protective equipment:** No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unprotected personnel away. Wear appropriate personal protective equipment given in section 8.

Environmental precautions:

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

Stop spill at source. Dike and contain. Wash away remainder with plenty of water.

Reference to other sections

No dangerous substances are released.

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

Precautions for safe handling Isolate from oxidizers, heat, & open flame.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Keep separated from strong oxidants. Keep dry.

Information about storage in one common storage facility: Use ventilation along the floor. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.

Further information about storage conditions: Shelf life: 12 months

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Specific end use(s) No further relevant information available.

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8 Exposure controls/personal protection

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

Control parameters

Components with limit values that require monitoring at the workplace:

57-55-6 propane-1,2-diol

WEEL	10 mg/m ³
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Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.

Protection of hands:

No chemical-protective gloves required.

Preventive skin protection by use of skin-protecting agents is recommended.

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 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.

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

Nitrile rubber, NBR

Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Color:	Purple
Odor:	Nearly odorless
Odour threshold:	Not determined.

pH-value:	Not determined.
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Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

Flash point:	101 °C (214 °F)
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Flammability (solid, gaseous):	Not applicable.
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Ignition temperature:	371 °C (700 °F)
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Decomposition temperature:	Not determined.
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Auto igniting:	Product is not selfigniting.
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Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	2.6 Vol %
Upper:	12.6 Vol %
Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
Density at 20 °C (68 °F):	1.03 g/cm ³ (8.595 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	60.0 %
Water:	40.0 %
VOC content:	60.0 %
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability: Stable under normal conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Isolate from oxidizers, heat, & open flame.

Incompatible materials: Reacts with strong oxidants, causing fire & explosion hazard.

Hazardous decomposition products: Carbon Monoxide, Carbon Dioxide from burning.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: defatting and dermatitis

on the eye: redness, tearing, blurred vision, wash thoroughly after handling

Inhalation: Anesthetic, Irritates respiratory track. Acute overexposure can cause serious nervous system depression. Vapor harmful

Swallowing: Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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.

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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Mammalian: Lowest known lethal dose : LD50 (Oral), 18300.0mg/kg (Guinea Pigs)

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

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.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation: Smaller quantities can be disposed of with household waste.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number

DOT, ADR, ADN, IMDG, IATA Void

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA Void

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class Void

Packing group

DOT, ADR, IMDG, IATA Void

Environmental hazards:

Marine pollutant: No

Special precautions for user Not applicable.

UN "Model Regulation": -

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15 Regulatory information

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

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

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:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

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.

Contact: midwest@exone.com

Date of preparation / last revision 11/10/2015 / 1

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)

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, EU)

Acute Tox. 4: Acute toxicity, Hazard Category 4

* **Data compared to the previous version altered.**