

Trade Name: DEK Reflow Oven Cleaner-470ml Can
Part Number: 173012
Issue Number: 001 Date: 12.2015



Safety data sheet

ACC. TO OSHA HCS

1 Identification

Product identifier

Product name

ROC - Reflow oven cleaner

Product number

MCC-ROC, MCC-ROCG, MCC-ROCP, MCC-ROCD,173012

Synonyms; trade names

“ROC-High performance reflow oven cleaner”

Recommended use of the chemical
and restrictions on use Application

Cleaning agent.



Details of the supplier of the safety data sheet

Manufacturer/Supplier:

ASM Assembly Systems Switzerland GmbH

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2 Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory	Status This Product is Not Hazardous under the OSHA Hazard Communication Standard.
Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified
Human health	May be slightly irritating to eyes. The product is considered to be a low hazard under normal conditions of use. May be slightly irritating to skin.
Environmental	The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.
Physicochemical	Not considered to be a significant hazard due to the small quantities used.
Label elements	
Hazard statements	NC Not Classified
Precautionary statements	P402+P404 Store in a dry place. Store in a closed container. P501 Dispose of contents/container in accordance with national regulations.
WHMIS Label	Materials Causing Other Toxic Effects.

3 Composition/information on ingredients

Mixtures

D.I. WATER	60-100%
CAS number:	7732-18-5
Classification	Not Classified
2-AMINO-2-METHYLPROPANOL	1-5%
CAS number:	124-68-5
Classification	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Aquatic Chronic 3 - H412

The Full Text for all Hazard Statements are Displayed in Section 16.

Composition comments	The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200,TSCA: The ingredients of this product are on the TSCA Inventory.
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4 First-aid measures

Description of first aid measures

General information

Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Consult a physician for specific advice.

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

Ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately.

Skin Contact

Wash skin thoroughly with soap and water. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.

Eye contact

Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation

Sore throat. Nausea, vomiting.

Ingestion

Diarrhea. Drowsiness, dizziness, disorientation, vertigo.

Skin contact

Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

Eye contact

May cause temporary eye irritation. Profuse watering of the eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor

No specific recommendations. If in doubt, get medical attention promptly.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing media

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media

Water spray. Never use water by itself on spillage; this will spread the spill and cause further contamination.

Special hazards arising from the substance or mixture

Flammability Class

The product is not flammable. TCC (Tag closed cup).

Specific hazards

Considering the size of the packaging, the risk is regarded as minimal. No unusual fire or explosion hazards noted.

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Oxides of carbon. Oxides of nitrogen.

Advice for firefighters

Protective actions during firefighting

Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation.

Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. No smoking, sparks, flames or other sources of ignition near spillage. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

Environmental precautions

Environmental precautions

Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up

Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground. Contain and absorb spillage with sand, earth or other noncombustible material. Collect spillage with a shovel and broom, or similar and reuse, if possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. It is recommended that gloves are made of the following material: Neoprene. Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards.

7 Handling and storage

Precautions for safe handling

Usage precautions

Provide adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class

Unspecified storage. The product is not flammable.

Specific end uses(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

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8 Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Ingredient comments

WEL = Workplace Exposure Limits

Exposure controls

Protective equipment



Appropriate engineering controls

No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber).

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

Hygiene measures

Avoid inhalation of spray mist and contact with skin and eyes. When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn.

Wear self-contained breathing apparatus with full facepiece.

Thermal hazards

Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.

9 Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Clear liquid.
Color	Colorless.
Odor	Mild.
Odor threshold	No information available.
Melting point	No information available.
Initial boiling point and range	97°C/208°F @ 760 mm Hg
Evaporation rate	No information available.
Evaporation factor	No information available.
Vapour pressure	31.00 mbar @ 25°C
Vapour density	>1
Bulk density	0.99 g/cm ³
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Decomposition Temperature	No information available.
Volatility	100%
Volatile organic compound	This product contains a maximum VOC content of 50 g/litre.
Flammability	The product is not flammable.

10 Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Will not polymerize.
Conditions to avoid	Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.
Materials to avoid	Avoid contact with strong oxidizing agents. Nitric acid (HNO ₃). Sulfuric acid (H ₂ SO ₄). Aldehydes. Acids -organic, halogenated.
Hazardous decomposition product	Heating may generate the following products: Toxic and corrosive gases or vapors. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO ₂). Carbon monoxide (CO).

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11 Toxicological information

Information on toxicological effects

Inhalation

Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing.

Ingestion

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

Skin Contact

Product has a defatting effect on skin. May cause allergic contact eczema.

Eye contact

May cause temporary eye irritation.

Medical Symptoms

Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

12 Ecological Information

Ecotoxicity

There are no data on the ecotoxicity of this product.

Toxicity

Toxicity

Not considered toxic to fish.

Persistence and degradability

Persistence and degradability

No data available.

Bioaccumulative potential

Bio-Accumulative

Potential No data available on bioaccumulation.

Partition coefficient

No information available.

Mobility in soil

Mobility

No data available.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB. No data available.

Other adverse effects

Other adverse effects

None known.

13 Disposal considerations

Waste treatment methods

General information

Refer to manufacturer/supplier for information on recovery/recycling. Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products wherever possible.

14 Transport information

General

Not regulated. The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

UN Number

Not applicable. No information required.

UN proper shipping name

Not applicable. No information required.

Transport hazard class(es)

Not applicable. No information required.

Transport labels

Packing group

Not applicable. No information required.

Environmental hazards

Environmentally Hazardous Substance No.

Special precautions for user

Not applicable. No information required.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable. No information required.

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15 Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA) Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities Not listed.

SARA 313 Emission Reporting Not listed.
CAA Accidental Release Prevention Not listed.

SARA (311/312) Hazard Categories None.

OSHA Highly Hazardous Chemicals Not listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins Not listed.

California Air Toxics "Hot Spots" (A-I) Not listed.

Rhode Island "Right To Know" List Not listed.

Minnesota "Right To Know" List Not listed.

Inventories
Canada - DSL/NDL Yes

US - TSCA All ingredients are listed.

16 Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	9/30/2015
Revision	13
Supersedes date	8/21/2015
SDS No.	BULK_ROC
SDS status	Approved.
Hazard statements in full	H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
NFPA - health hazard	Irritation, minor residual injury. (1)
NFPA - flammability hazard	Will not burn. (0)
NFPA - instability hazard	Normally stable. (0)
ACA HMIS Health rating.	Slight Hazard. (1)
ACA HMIS Flammability rating.	Will not burn. (0)
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	A

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.