



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Sabaclean 48
CAS # Mixture
Product use Cleaner
Manufacturer SABA Dinxperlo BV
Industriestraat 3
P.O. Box 3
NL - 7090 AA Dinxperlo, NL
Phone: + 31 315 658999
Emergency Phone: 1-800-535-5053 (24/7)
International Phone: 1-352-323-3500 (Collect)

2. Hazards Identification

Emergency overview WARNING
FLAMMABLE LIQUID AND VAPOR.
CAUSES SKIN IRRITATION. CAUSES EYE IRRITATION. CAUSES RESPIRATORY TRACT IRRITATION.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes Causes irritation.

Skin Causes irritation.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion May cause stomach distress, nausea or vomiting.
Aspiration of material into lungs can cause chemical pneumonitis.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects Components of this product have been identified as having potential environmental concerns.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Heptane	142-82-5	60 - 100
Methylcyclohexane	108-87-2	15 - 40
Cyclohexane	110-82-7	0.5 - 1.5

4. First Aid Measures

First aid procedures

Eye contact Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice

Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Carbon dioxide. Dry chemical. Foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

7. Handling and Storage

Handling	Keep container tightly closed. Use only with adequate ventilation. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Avoid contact with skin and clothing. Avoid breathing vapors or mists of this product. Avoid contact with eyes. Wash thoroughly after handling.
Storage	Keep out of reach of children. Do not store at temperatures above 120°F (49°C). Keep away from heat, sparks, and flame. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
Cyclohexane	ACGIH-TLV TWA: 100 ppm OSHA-PEL TWA: 300 ppm
Heptane	ACGIH-TLV TWA: 400 ppm STEL: 500 ppm OSHA-PEL TWA: 500 ppm
Methylcyclohexane	ACGIH-TLV TWA: 400 ppm OSHA-PEL TWA: 500 ppm

Engineering controls

General ventilation normally adequate.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Hand protection

Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection

As required by employer code.

Respiratory protection

Avoid breathing mists or vapors. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear.
Color	Colorless
Form	Fluid
Odor	Petroleum
Odor threshold	Not available
Physical state	Liquid
pH	Not available
Melting point	< -76.00 °F (< -60 °C)
Freezing point	< -76.00 °F (< -60 °C)
Boiling point	201.20 °F (94 °C)
Pour point	Not available
Evaporation rate	5.4 (BuAc = 1)
Flash point	24.80 °F (-4 °C)
Auto-ignition temperature	419.00 °F (215 °C)
Flammability limits in air, lower, % by volume	1.1
Flammability limits in air, upper, % by volume	6.7
Vapor pressure	48 hPa
Vapor density	Not available
Specific gravity	0.7 g/cm ³
Octanol/water coefficient	4.66
Solubility (H ₂ O)	Not miscible or difficult to mix
VOC (Weight %)	100%
Viscosity	1 mPas

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid high temperatures. Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Cyclohexane	13.9 mg/l/4h rat
Heptane	Not available
Methylcyclohexane	41500 mg/m ³ mouse

Component analysis - Oral LD50

Ingredient(s)	LD50
Cyclohexane	8000 mg/kg rat; 813 mg/kg mouse
Heptane	15000 mg/kg rat
Methylcyclohexane	2250 mg/kg mouse

Effects of acute exposure

Eye	Causes irritation.
Skin	Causes irritation.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	May cause stomach distress, nausea or vomiting. Aspiration of material into lungs can cause chemical pneumonitis.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Name of Toxicologically Synergistic Products	Not determined

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Cyclohexane 110-82-7 72 Hr EC50 *Desmodesmus subspicatus*: >500 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Cyclohexane 110-82-7 96 Hr LC50 *Pimephales promelas*: 3.96-5.18 mg/L [flow-through]; 96 Hr LC50 *Pimephales promelas*: 23.03-42.07 mg/L [static]; 96 Hr LC50 *Lepomis macrochirus*: 24.99-44.69 mg/L [static]; 96 Hr LC50 *Poecilia reticulata*: 48.87-68.76 mg/L [static]
96 Hr LC50 Cichlid fish: 375.0 mg/L

Heptane 142-82-5

Ecotoxicity - Water Flea - Acute Toxicity Data

Cyclohexane 110-82-7 24 Hr EC50 *Daphnia magna*: >400 mg/L
Heptane 142-82-5 24 Hr EC50 *Daphnia magna*: >10 mg/L

Persistence / degradability

This product is expected to be readily biodegradable.
Transformation due to hydrolysis is not expected to be significant.
Transformation due to photolysis is not expected to be significant.
Expected to degrade rapidly in air.

Bioaccumulation / accumulation

This material is not expected to be harmful.

Mobility in environmental media	This material is not expected to be harmful.
Environmental effects	Not determined
Aquatic toxicity	This product is toxic to fish and aquatic organisms.
Partition coefficient	4.66
Chemical fate information	Not determined
Other adverse effects	Not determined

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose in accordance with all applicable regulations.
Contaminated packaging	Dispose in accordance with all applicable regulations.

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name	Heptanes
Hazard class	3
UN number	UN1206
Packing group	II

Additional information:

Special provisions	IB2, T4, TP1
Packaging exceptions	150
ERG number	128



Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name	HEPTANES
Hazard class	3
UN number	UN1206
Packing group	II

Additional information:

Packaging exceptions	<1L - Limited Quantity
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15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

Cyclohexane	110-82-7	1 %
Heptane	142-82-5	1 %
Methylcyclohexane	108-87-2	1 %

WHMIS status Controlled

WHMIS classification Class B - Division 2 - Flammable Liquid, Class D - Division 2B

WHMIS labeling



Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Cyclohexane 110-82-7 1000 Lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Cyclohexane 110-82-7 1.0 % de minimis concentration

U.S. - CWA (Clean Water Act) - Hazardous Substances

Cyclohexane 110-82-7 Present

CERCLA (Superfund) reportable quantity

Cyclohexane: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Hazardous substance

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Cyclohexane 110-82-7 Present
Heptane 142-82-5 Present
Methylcyclohexane 108-87-2 Present

U.S. - Louisiana - Reportable Quantity List for Pollutants

Cyclohexane 110-82-7 1000 Lb final RQ; 454 kg final RQ

U.S. - Massachusetts - Right To Know List

Cyclohexane 110-82-7 Present
Heptane 142-82-5 Present
Methylcyclohexane 108-87-2 Present

U.S. - Minnesota - Hazardous Substance List

Cyclohexane 110-82-7 Present
Heptane 142-82-5 Present
Methylcyclohexane 108-87-2 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Cyclohexane 110-82-7 sn 0565
Heptane 142-82-5 sn 1339
Methylcyclohexane 108-87-2 sn 1242

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Cyclohexane 110-82-7 1000 Lb RQ (air); 1 lb RQ (land/water)

U.S. - Pennsylvania - RTK (Right to Know) List

Cyclohexane 110-82-7 Environmental hazard
Heptane 142-82-5 Present
Methylcyclohexane 108-87-2 Present

U.S. - Rhode Island - Hazardous Substance List

Cyclohexane 110-82-7 Toxic; Flammable
Heptane 142-82-5 Toxic; Flammable
Methylcyclohexane 108-87-2 Toxic

Inventory name

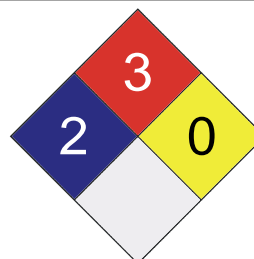
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 2
Flammability	3
Physical Hazard	0
Personal Protection	X



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.