Material Safety Data Sheet

PRODUCT NAME

MEGA CHECK DEVELOPER

(1/9)

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identity (Trade Name As Used On Label); MEGA CHECK DEVELOPER

Recommended use of the chemical and restrictions on use; DEVELOPER

Manufacturer/Supplier/Distributor Information;

Name; NAMBANG CNA CO., LTD.

Address; / 204, Chupal Sandan 1-gil, Paengseong-eup, Pyeongtaek-si, Gyeonggi-do, 17998 Korea

Emergency phone number; 82 31 651 5911~8

SECTION 2. HAZARDS IDENTIFICATION

Hazard · Risk Classification

Hazard Class	Hazard category
Flammable aerosols	1
Flammable gases	1
Gases under pressure	Liquefied gas
Flammable liquids	2
Skin corrosion/irritation	2
Eye damage/irritation	2
Toxic to reproduction	2
Specific target organ toxicity(Single exposure)	3(Narcotic effects)
Specific target organ toxicity(Repeated exposure)	2
Aspiration hazard	1
Hazardous to the aquatic environment-Long-term hazard	2

GHS label elements, including precautionary statements

Category	Indication
Symbol	
Signal word	Danger
Hazard · Risk Statement	H222 Extremely flammable aerosol. H229 Pressurized container: may burst if heated.

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		H220 Extremely flammable gas.
		H280 Contains gas under pressure; may explode if heated.
		H225 Highly flammable liquid and vapour.
		H315 Causes skin irritation.
		H319 Causes serious eye irritation.
		H361 Suspected of damaging fertility or the unborn child.
		H336 May cause drowsiness or dizziness.
		H373 May cause damage to organs <> through prolonged or repeated
		exposure.
		H304 May be fatal if swallowed and enters airways.
		H411 Toxic to aquatic organisms due to long-term effects
		P201 Obtain special instructions before use.
		P202 Do not handle until all safety precautions have been read and
		understood.
		P210 Keep away from heat/sparks/open flames/hot surfaces. No
		smoking.
		P211 Do not spray on an open flame or other ignition source.
		P233 Keep container tightly closed.
		P240 Ground/Bond container and receiving equipment.
		P241 Use explosion-proof electrical/ventilating/lighting//equipment.
	Prevention	P242 Use only non-sparking tools.
		P243 Take precautionary measures against static discharge.
		P251 Do not pierce or burn, even after use.
		P260 Do not breathe dust/fume/gas/mist/vapours/spray.
		P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
		P264 Wash ··· thoroughly after handling.
		P271 Use only outdoors or in a well-ventilated area.
		P273 Avoid release to the environment.
		P280 Wear protective gloves/protective clothing/eye protection/face
		protection.
		P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/
Precautionary		doctor/
statements		P302+P352 IF ON SKIN: Wash with plenty water/
		P303+P361+P353 IF ON SKIN (or hair): Take off immediately all
		contaminated clothing. Rinse skin with water/shower.
		P304+P340 IF INHALED: Remove person to fresh air and keep
		comfortable for breathing.
		P305+P351+P338 IF IN EYES: Rinse cautiously with water for several
		minutes. Remove contact lenses, if present and easy to do. Continue
		rinsing.
		P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/
	Response	P312 Call a POISON CENTER/doctor/···/if you feel unwell.
		P314 Get medical advice/attention if you feel unwell.
		P321 Specific treatment (see on this label)
		P331 Do NOT induce vomiting.
		P332+P313 If skin irritation occurs: Get medical advice/attention.
		P337+P313 If eye irritation persists: Get medical advice/attention.
		P362+P364 Take off contaminated clothing and wash it before reuse.
		P370+P378 In case of fire: Use to extinguish.
		P377 Leaking gas fire: Do not extinguish, unless leak can be stopped
		safely.
i e	1	P381 Eliminate all ignition sources if safe to do so.

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	P391 Collect spillage.
Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P410+P403 Protect from sunlight. Store in a well-ventilated place. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Disposal	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

Other hazards which do not result in classification: No information found

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	OTHER NAME	CAS NUMBER	Content (%)
Isopropyl alcohol	_	67-63-0	15~25
n-hexane	_	110-54-3	5~15
Talc powder	_	14807-96-6	5~15
Silica	_	112945-52-5	0.1~1
Methylcyclohexane	_	108-87-2	1~10
3-Methylhexane	_	589-34-4	1~5
2-Methylhexane	_	591-76-4	1~5
1,2-Dimethylcyclopentane	_	2452-99-5	0.1~1
1,3-Dimethylcyclopentane	_	2453-00-1	0.1~1
Heptane	_	142-82-5	0.1~0.5
Propane	_	74-98-6	5~15
Butane	_	106-97-8	30~40

*** CFC FREE**

SECTION 4. FIRST AID MEASURES

Eye contact; Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. Skin contact; In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

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Inhalation; Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion; Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately. **Indication of immediate medical attention and notes for physician;** Consult a physician. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media; Use water spray to keep fire exposed containers cool. If substance does ignite, use CO2, dry chemical or foam.

Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products); No information found

Special protective equipment and precautions for fire fighters; In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode. Combustion by-products include phosgene and hydrogen chloride gases. Structural firefighters' clothing provides only limited protection to the combustion products of this material.

SECTION 6. ACCIDENTAL RELEASE MEASURES.

Personal precautions, protective equipment and emergency procedures; No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions and protective procedures; Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up;

- Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use only non-sparking tools.

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- Small Spills: Wipe up with absorbent material(e.g. cloth, fleece).

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling; Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage (including any incompatibilities); Store in accordance with local regulations. Store in a segregated and approved area. Store in original container, protected from direct sunlight. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters (e.g. occupational exposure limit values, biological limit values);

Isopropyl alcohol; TWA 200 ppm, STEL 400 ppm

Heptane; TWA 400 ppm, STEL 500 ppm

n-hexane; TWA 50 ppm Talc powder; TWA 2 mg/m³

Methylcyclohexane; TWA 400 ppm

Engineering controls; Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal protective equipment;

- Eye / face protection; Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles.

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- Skin protection; Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

 Recommended: lab coat.
- Respiratory protection; Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. PHYSICAL / CHEMICAL CHARACTERISTICS

Appearance; White liquid

Odor; Alcohol odor

Odour threshold; No information found

Ph; No information found

Melting point/freezing point; No information found Initial boiling point and boiling range; Liquid; >69°C

Flash point; <-105°C(c.c.)(Propane) / Liquid; >-22°C

Evaporation rate; No information found

Flammability (solid, gas); No information found

Upper/lower flammability or explosive limits; Propane; 9.5 / 2.1 %

Vapour pressure; No information found Vapour density; No information found Specific Gravity ($H_2O = 1$); 0.82 \pm 0.05 Relative density; No information found

Solubility(ies); soluble

Partition coefficient; n-octanol/water; Isopropyl alcohol; 0.05

Auto-ignition temperature; No information found

Decomposition temperature; No information found

Viscosity; No information found

Molecular Weight; No information found

SECTION 10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions; Stable under ordinary conditions of use and storage

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Conditions to avoid (e.g. static discharge, shock or vibration, etc); Heat, flames and sparks. Incompatible materials.

Incompatability (Materials to Avoid); Strong oxidizing agents.

Hazardous Decomposition Products; carbon oxide

SECTION 11. TOXICOLOGICAL INFORMATION

- Isopropyl alcohol -

Information on the likely routes of exposure; No information found

Acute toxicity

- Oral; LD50 5840 mg / kg Species: Rat (OECD TG 401)

- Dermal; LD50 16400 mg / kg Species: Rabbit (OECD TG402)

- Inhalation; Steam LC50> 10000 ppm 6 hr Species: Rat (OECE TG 403, GLP)

Skin corrosion/irritation; No information found

Serious eye damage/irritation; No information found Respiratory or skin sensitization; No information found

Germ cell mutagenicity; No information found

Carcinogenicity; No information found

Reproductive toxicity; No information found

Specific target organ toxicity (single exposure); No information found

Specific target organ toxicity (repeated exposure); No information found

Aspiration hazard; No information found

- Methylcyclohexane -

Information on the likely routes of exposure; No information found

Acute toxicity

- Oral; No information found

- Dermal; LD50> 2000 mg / kg Species: Guinea pig (OECD Guideline 402) * Source: ECHA

- Inhalation; LC50> 26.3 mg / ℓ 1 hr Species: Mouse Source: ECHA

Skin corrosion/irritation; No information found

Serious eye damage/irritation; No information found Respiratory or skin sensitization; No information found

Germ cell mutagenicity; No information found

Carcinogenicity; No information found

Reproductive toxicity; No information found

Specific target organ toxicity (single exposure); No information found

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Specific target organ toxicity (repeated exposure); No information found

Aspiration hazard; No information found

SECTION 12. ECOLOGICAL INFORMATION

Aquatic and terrestrial ecotoxicity; No information found

Persistence and degradability; No information found

Bioaccumulative potential; No information found

Mobility in soil; No information found

Other adverse effects; No information found

SECTION 13. DISPOSAL CONSIDERATION

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name; Aerosols

Hazard Class; 2.1 UN-NUMBER; 1950

SECTION 15. REGULATORY INFORMATION

Follow all regulation in your country

SECTION 16. OTHER INFORMATION

Issuing date; 1996.06.20

Revision number and date; 2019.01.14

Others; This information has been faithfully prepared on the basis of various knowledge and information and is not to guarantee the quality of this product. Also, this information can be changed without prior

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notice in accordance with introduction of new knowledge and test results, etc. For inquiries, please contact us or the place of product purchase.