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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 35869

NAME: Sodium metavanadate

SYNONYMS: Sodium (meta)vanadate

Sodium trioxovanadate

24 HOUR EMERGENCY

TELEPHONE:

(800) 535-5053(USA)

352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE:

(630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

ACUTE TOXICITY, ORAL (CATEGORY 3), H301 ACUTE TOXICITY, INHALATION (CATEGORY 4), H332 EYE IRRITATION (CATEGORY 2A), H319 REPRODUCTIVE TOXICITY (CATEGORY 2), H361 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (CATEGORY 1), H372 SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 2), H401 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 2), H411

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD DANGER

HAZARD STATEMENT(S)

H301 TOXIC IF SWALLOWED.

H319 CAUSES SERIOUS EYE IRRITATION.

H332 HARMFUL IF INHALED.

H361 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN

CHILD.

H372 CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE.

H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PRECAUTIONARY STATEMENT(S)

P201 OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.

P202 DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE

BEEN READ AND UNDERSTOOD.

P260 DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/

SPRAY.

P264 WASH SKIN THOROUGHLY AFTER HANDLING. P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS

PRODUCT.

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 + P330 IF SWALLOWED: IMMEDIATELY CALL A POISON

CENTER/DOCTOR. RINSE MOUTH.

P304 + P340 + P312 IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP

COMFORTABLE FOR BREATHING. CALL A POISON

CENTER/DOCTOR IF YOU FEEL UNWELL.

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 + P313 IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/

ATTENTION.

P337 + P313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/

ATTENTION.

P391 COLLECT SPILLAGE. P405 STORE LOCKED UP.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT **NONE OTHERWISE** CLASSIFIED (HNOC) OR NOT COVERED BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: NaVO₃

MW: 121.93

CAS-NO. 13718-26-8

PURITY: \geq 98% (Assay, Ex V)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Sodium metavanadate		
	ACUTE TOX. 3; ACUTE TOX. 4;	<= 100%
	EYE IRRIT. 2A; REPR. 2; STOT	
	RE 1; AQUATIC ACUTE 2;	
	AQUATIC CHRONIC 2; H301,	
	H332, H319, H361, H372, H401,	
	H411	

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE MOVE OUT OF DANGEROUS AREA.CONSULT A

PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE

DOCTOR IN ATTENDANCE.

IF INHALED IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF

NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN

CONTACT

VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A

PHYSICIAN.

IN CASE OF EYE

RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE

LEAST 15 MINUTES AND CONSULT A PHYSICIAN. **CONTACT**

IF SWALLOWED NEVER GIVE ANYTHING BY MOUTH TO AN

UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER.

CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND

EFFECTS, BOTH ACUTE AND DELAYED

THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

SECTION 2.2) AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT

NEEDED

NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

EXTINGUISHING MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS SODIUM OXIDES, VANADIUM/VANADIUM OXIDES

ARISING FROM THE SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF-CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONALWEAR RESPIRATORY PROTECTION. AVOID DUSTPRECAUTIONS,FORMATION. AVOID BREATHING VAPOURS, MIST ORPROTECTIVEGAS. ENSURE ADEQUATE VENTILATION. EVACUATEEQUIPMENT ANDPERSONNEL TO SAFE AREAS. AVOID BREATHING DUST.

EMERGENCY

PROCEDURES FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO PRECAUTIONS DO SO. DO NOT LET PRODUCT ENTER DRAINS.

DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

METHODS AND PICK UP AND ARRANGE DISPOSAL WITHOUT CREATING

MATERIALS FOR DUST. SWEEP UP AND SHOVEL. KEEP IN SUITABLE,

CONTAINMENT AND CLEANING UP

CLOSED CONTAINERS FOR DISPOSAL.

REFERENCE TO OTHER SECTIONS

FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

FURTHER PROCESSING OF SOLID MATERIALS MAY RESULT IN THE FORMATION OF COMBUSTIBLE DUSTS. THE POTENTIAL FOR COMBUSTIBLE DUST FORMATION SHOULD BE TAKEN INTO CONSIDERATION BEFORE ADDITIONAL PROCESSING OCCURS. AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST

AND AEROSOLS.

PROVIDE APPROPRIATE EXHAUST VENTILATION AT

PLACES WHERE DUST IS FORMED. FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND

WELL-VENTILATED PLACE.

HYGROSCOPIC KEEP IN A DRY PLACE.

Store at RT

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2 NO

OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

COMPONENT	CAS-NO.	VALUE	CONTROL	BASIS
			PARAMETERS	
Sodium metavanadate	13718-26-8	С	0.05 MG/M3	USA. NIOSH RECOMMENDED
				EXPOSURE LIMITS
	REMARKS	15 MINUTE CEILING VALUE		
		С	0.05 MG/M3	USA. NIOSH RECOMMENDED
				EXPOSURE LIMITS
		15 MINUTE CEILING VALUE		

EXPOSURE CONTROLS

APPROPRIATE AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH **ENGINEERING** HANDS BEFORE BREAKS AND IMMEDIATELY AFTER

CONTROLS HANDLING THE PRODUCT.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR **PROTECTION**

EYE PROTECTION TESTED AND APPROVED UNDER

APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH

(US) OR EN 166(EU).

SKIN PROTECTION HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED

PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY

PRACTICES. WASH AND DRY HANDS.

FULL CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED: DERMATRIL (KCL 740, SIZE M)

SPLASH CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

BREAK THROUGH TIME: 480 MIN

MATERIAL TESTED: DERMATRIL (KCL 740, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER

SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374. CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE

SCENARIO.

COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE **BODY PROTECTION**

TYPE OF PROTECTIVE EOUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF

THE DANGEROUS SUBSTANCE AT THE SPECIFIC

WORKPLACE.

RESPIRATORY WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING **PROTECTION**

RESPIRATORS ARE APPROPRIATE USE A FULLFACE

PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF

PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE

GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN

(EU).

CONTROL OF **ENVIRONMENTAL EXPOSURE**

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE

INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

White to yellow to light beige powder APPEARANCE

ODOUR NO DATA AVAILABLE ODOUR THRESHOLD NO DATA AVAILABLE PH NO DATA AVAILABLE

MELTING 630 °C

POINT/FREEZING POINT INITIAL BOILING POINT AND BOILING RANGE

FLASH POINT

EVAPORATION RATE NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOUR PRESSURE NO DATA AVAILABLE VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY

10 G/L - OECD TEST GUIDELINE 105 - SOLUBLE WATER SOLUBILITY

PARTITION COEFFICIENT: NO DATA AVAILABLE

N- OCTANOL/WATER

AUTO-IGNITION NO DATA AVAILABLE

TEMPERATURE

DECOMPOSITION NO DATA AVAILABLE

TEMPERATURE

VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES NO DATA AVAILABLE

OXIDIZING PROPERTIES THE SUBSTANCE OR MIXTURE IS NOT CLASSIFIED AS

OXIDIZING.

OTHER SAFETY INFORMATION

NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS

NO DATA AVAILABLE

CONDITIONS TO AVOID NO DATA AVAILABLE

INCOMPATIBLE MATERIALS

STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - SODIUM OXIDES,

VANADIUM/VANADIUM OXIDES

OTHER DECOMPOSITION PRODUCTS - NO DATA

AVAILABLE

IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - 183 MG/KG

(OECD TEST GUIDELINE 401)

LC50 INHALATION - RAT - 4 H - 4.13 MG/L

(OECD TEST GUIDELINE 403)

LD50 DERMAL - RAT - > 2,500 MG/KG

(READ-ACROSS (ANALOGY))

LD50 INTRAPERITONEAL - RAT - 12 MG/KG

SKIN - EPISKIN HUMAN SKIN MODEL TEST

CORROSION/IRRITATION RESULT: NO SKIN IRRITATION (OECD TEST GUIDELINE 439)

SERIOUS EYE EYES RABBIT

DAMAGE/EYE IRRITATION RESULT: IRRITATING TO EYES.

(OECD TEST GUIDELINE 405)

RESPIRATORY OR SKIN SENSITISATION

MAXIMISATION TEST - GUINEA PIG DOES NOT CAUSE SKIN SENSITISATION.

(OECD TEST GUIDELINE 406)

GERM CELL MUTAGENICITY IN VITRO TESTS DID NOT SHOW MUTAGENIC EFFECTS

CARCINOGENICITY

IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS

IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED

HUMAN CARCINOGEN BY IARC.

NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED

CARCINOGEN BY NTP.

OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON

OSHA S LIST OF REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY SUSPECTED OF DAMAGING THE UNBORN CHILD.

SUSPECTED OF DAMAGING FERTILITY.

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE

EXPOSURE

NO DATA AVAILABLE

SPECIFIC TARGET ORGAN

TOXICITY - REPEATED

EXPOSURE

CAUSES DAMAGE TO ORGANS THROUGH PROLONGED

OR REPEATED EXPOSURE.

ORAL - IRREGULAR CARDIAC ACTIVITY

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION

REPEATED DOSE TOXICITY - RAT - ORAL - LOWEST OBSERVED ADVERSE EFFECT LEVEL - 1.7 MG/KG

RTECS: YW0875000

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE

NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

TOXICITY TO FISH STATIC TEST LC50 - POECILIA RETICULATA (GUPPY) -

6.1 MG/L - 96 H

FLOW-THROUGH TEST NOEC - PIMEPHALES PROMELAS (FATHEAD MINNOW) - 0.12 MG/L - 28 D

PERSISTENCE AND THE METHODS FOR DETERMINING

DEGRADABILITY BIODEGRADABILITY ARE NOT APPLICABLE TO

INORGANIC SUBSTANCES.

BIOACCUMULATIVE

POTENTIAL

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND VPVB PBT/VPVB ASSESSMENT NOT AVAILABLE AS

ASSESSMENT

CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT

CONDUCTED

OTHER ADVERSE EFFECTS AN ENVIRONMENTAL HAZARD CANNOT BE

EXCLUDED IN THE EVENT OF UNPROFESSIONAL

HANDLING OR DISPOSAL.

TOXIC TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

SECTION 13. **DISPOSAL CONSIDERATIONS**

WASTE TREATMENT METHODS

PRODUCT OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO

A LICENSED DISPOSAL COMPANY. CONTACT A

LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN

AFTERBURNER AND SCRUBBER.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: VANADIUM COMPOUND, N.O.S. (Sodium metavanadate)

UN NUMBER: 3285 CLASS: 6.1 PACKING GROUP: III

REPORTABLE QUANTITY

(RQ):

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: VANADIUM COMPOUND, N.O.S. (Sodium metavanadate)

UN NUMBER: 3285
CLASS: 6.1
PACKING GROUP: III
EMS-NO: F-A, S-A
MARINE POLLUTANT: YES

IATA

PROPER SHIPPING NAME: VANADIUM COMPOUND, N.O.S. (Sodium metavanadate)

UN NUMBER: 3285 CLASS: 6.1 PACKING GROUP: III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

SARA 313 COMPONENTS THE FOLLOWING COMPONENTS ARE SUBJECT TO

REPORTING LEVELS ESTABLISHED BY SARA TITLE III,

SECTION 313:

CAS-NO. REVISION DATE

Sodium metavanadate 13718-26-8 07-31-1994

SARA 311/312 HAZARDS

ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Sodium metavanadate 13718-26-8 07-31-1994

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Sodium metavanadate 13718-26-8 07-31-1994

CALIFORNIA PROP. 65 COMPONENTS

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H301 TOXIC IF SWALLOWED.

H319 CAUSES SERIOUS EYE IRRITATION.

H332 HARMFUL IF INHALED.

H361 SUSPECTED OF DAMAGING FERTILITY OR THE

UNBORN CHILD.

H372 CAUSES DAMAGE TO ORGANS THROUGH

PROLONGED OR REPEATED EXPOSURE.

H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

MSDS LEGEND

MW: MOLECULAR WEIGHT
MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL

HYGINISTS

CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA) TLV: THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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